DOCUMENT RESUME

FD 311 882 IR 014 002

AUTHOR	Parer, Michael S., Ed.
TITLE	Nurse Education in Distance Education. Proceedings of National Workshop for Nurse and Health Educators (Churchill, Australia, February 4-7, 1987).
INSTITUTION	Gippsland Inst., Churchill (Australia). Centre for Distance Learning.
REPORT NO	ISBN-0-909170-21-5
PUB DATE	88
NOTE	121p.
AVAILABLE FROM	Centre for Distance Learning, Gippsland Institute, Switchback Road, Churchill 3842, Victoria, Australia ($20.00).
PUB TYPE	Collected Works - Conference Proceedings (021) -- Viewpoints (120) -- Reports - Research/Technical (143)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	Cost Effectiveness; *Distance Education; Efficiency; External Degree Programs; Foreign Countries; *Health Education; Higher Education; Instructional Development; Instructional Effectiveness; Material Development; Needs Assessment; *Nursing Education; *Professional Development; *Teacher Workshops; Teaching Methods
IDENTIFIERS	Aboriginal People; Australia

ABSTRACT

A workshop for nurse and health educators involved in the development of distance education study materials, methods, and delivery systems was held in February 1987 at the Center for Distance Learning at Gippsland Institute. Goals were: (1) to explore distance education approaches to meet nursing education needs; (2) to develop skills to plan, produce and improve distance education study materials; (3) to have participants experience a broad range of alternative methods for nursing education; (4) to share the problems and the potentials of using distance education in teaching; and (5) to examine the implication of distance education for future nursing education. The proceedings include papers presented during the 4-day workshop on such topics as the efficiency and effectiveness of distance education for nursing education, needs assessment, theory and research in distance education, the Aboriginal Health Program, the Nursing School of the Air, and the role of distance education in training the remote area nurse. Summaries of the four workshops--sessions on writing an effective study guide, the use of non-print components in external study material, the training of clinical teachers and preceptors, and setting up a distance education system--are included, as are comments by participants about each of the workshops. Appendixes include a report on students' experience of external study at Gippsland Institute, materials for use by staff of the Aboriginal Health Program to develop a training program for health workers, and a list of workshop participants. (GL)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

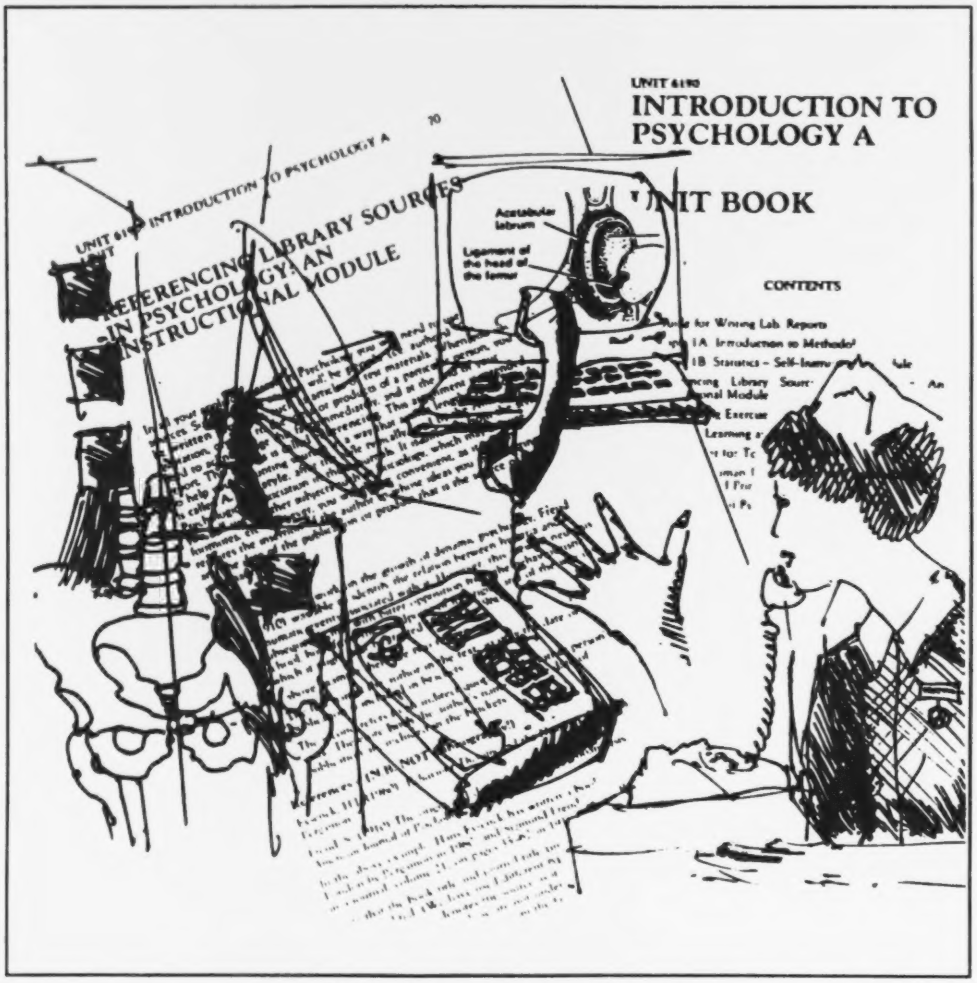
☒ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

ED311882

NURSE EDUCATION IN DISTANCE EDUCATION


UNIT 6190
INTRODUCTION TO PSYCHOLOGY A
UNIT BOOK
CONTENTS
UNIT 6190 INTRODUCTION TO PSYCHOLOGY A
REFERENCING LIBRARY SOURCES IN PSYCHOLOGY: AN INSTRUCTIONAL MODULE
Acetabular labrum
Ligament of the head of the femur

PROCEEDINGS OF NATIONAL WORKSHOP
HELD AT GIPPSLAND INSTITUTE

4 -7 FEBRUARY 1987

CENTRE FOR DISTANCE LEARNING
GIPPSLAND INSTITUTE

IR014002

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Michael S. Parer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

NURSE EDUCATION IN DISTANCE EDUCATION

First Published 1988
Centre for Distance Learning
Gippsland Institute
Victoria 3842 Australia

Telephone (051) 220277
Fax No. (051) 222876

All rights reserved

National Library of Australia
Cataloguing in Publication

Nurse education in distance education.

Includes bibilographics.

ISBN O 909170 21 5.

1. Nursing - Study and teaching (Higher) - Australia - Congresses. 2. Distance Education - Australia - Congresses. I. Parer, Michael S. (Michael Stanislaus), 1933 - . II. Gippsland Institute of Advanced Education. Centre for Distance Learning.

610.73'07' 1194

This book is copyright. Apart from any fair dealing for the purpose of private study, research, criticism, or review, as permitted under the Copyright Act, no part may be reproduced by any process or placed in computer memory without written permission. Enquiries should be made to the publisher.

Further copies may be obtained at $20 per copy from Centre for Distance Learning, Gipplsand Institute, Switchback Road Churchill, 3842. Australia.

NURSE EDUCATION IN DISTANCE EDUCATION

EDITED BY MICHAEL S. PARER

PROCEEDINGS OF NATIONAL WORKSHOP
HELD AT GIPPSLAND INSTITUTE

4 -7 FEBRUARY 1987

CENTRE FOR DISTANCE LEARNING
GIPPSLAND INSTITUTE

TABLE OF CONTENTS

Editors Note - Michael S Parer 1

Introduction
June Cochrane 3

Day One 5

Efficiency and Effectiveness in Distance Education
The Case for Nurse Education
Richard Johnson 7

Comments and Highlights by Participants about the opening session 11

Day Two 13

Distance Education - Lessons from yesterday and today 15
Peter Smith

The Development of an External Degree Course for Nurses at
Capricornia Institute 21
John Dekkers

Experiences in Developing and teaching Nurse Education Courses
Externally 25
Helen Connole, Pat Flynn, Anne Lloyd, Jane Shoebridge and
Elizabeth Sneddon

Needs Assessment
Karen Jones 41

Theory and Research in Distance Education
Michael S Parer 47

Comments and Highlights by Participants about the days program 49

Day Three 51

Aboriginal Health Program and pilot Q-Net project
Gail Perry 53

Nursing School of the Air
Robert N Thornton 57

Workshop One
    Summary 61
    Notes for workshop one
    Reports from groups

Workshop Two
    Summary 63
    Notes for workshop two
    Reports from groups

Workshop Three
    Summary 66
    Notes from workshop three
    Reports from groups

Comments and Highlights by Participants about days program 69

Day Four 71

The use of Viatel in the Family Medicine Program 73
Peter Fleming

What can Distance Education offer the Remote Area Nurse
Anne McMurray and Angela Parker-Siahaan 75

Workshop Four
    Summary
    Notes for workshop four 79
    Reports from groups

Comments and Highlights by Participants about the workshop 83

Reflections of a workshop leader 87
John Fenwick

A Report on the "Distance Education" workshop 88
Pamela Ryan

A personal reflection on the workshop 90
Daryl Nation

Reflections of someone who isn't a nurse 92
Jo Osborne

Appendix A - Students Experience of External Studies at Gippsland Institute 93

Appendix B 107

Appendix C 111

Workshop Participants 113

Editor's Note

The publishing of these workshop proceedings appears over my name as editor. While there is a certain convenience in that, I would not wish it to obscure the contribution of many others that have assisted. Particularly I wish to highlight that of Maxine Fine, Literary Editor of the Australian Nurses' Journal, Pamela Ryan of the College of Nursing Australia and Susanne Warn of the Mayfield Centre. Also I must acknowledge the support of June Cochrane the Coordinator of the Nurse and Health Educators' Special Interest Network of the International Council for Distance Education (ICDE) and the Australian and South Pacific External Studies Association (ASPESA); and particularly thank Rae Hill, Tara Harle and Robyn Benson of the Centre of Distance Learning at Gippsland Institute for their continued support.

This workshop, for Nurse and Health educators interested and involved in the development of Distance Education study materials, methods and delivery systems, was held in February 1987 at The Centre for Distance Learning, Gippsland Institute, Churchill, Victoria.

Our Objectives were:

1. Explore Distance Education approaches to meet nurse education needs.
2. Develop skills to plan, produce and improve Distance Education study materials.
3. Experience a broad range of alternative methods for Nurse Education.
4. Share problems and the potentials seen in using Distance Education in teaching.
5. Examine the implication of Distance Education for future nurse education.

These objectives will continue to be explored in a second National Workshop that is currently being prepared by a group in South Australia. The Chairperson of the Planning Committee is Karen Wootten at the Centre for Continuing Education for Country Nurses, Flinders Medical Centre, Bedford Park, South Australia, 5042, and the Workshop will be held from 5 - 8 April 1988 at Modbury Hospital Adelaide.

Further information may be obtained from Karen or from June Cochrane, the Coordinator of the Special Interest Network at the College of Nursing, Australia, phone (03) 203221 Ext 33.

INTRODUCTION

June F Cochrane
Executive Director
College of Nursing, Australia (CNA)

The Proceedings of the Distance Education in Nurse Education Workshop, convened at Gippsland Institute in February 1987, reflect the culmination of 18 months of coordinated planning by the Nurse and Health Educators' Special Interest Network of the International Council for Distance Education (ICDE) and the Australian and South Pacific External Studies Association (ASPESA) under the leadership of Dr Michael Parer, Head of the Educational Development and Research Unit at GIAE.

The Nurse and Health Educators' Special Interest Network was established at the pre-conference workshop of the ICDE held in Melbourne in August 1985. The Conference theme, 'Distance Education: Flexible Designs for Learning', was perceived as having particular relevance for nursing and it was during the pre-conference workshop for nurse educators that the Special Interest Network was formed under the auspices of ICDE, ASPESA and the College of Nursing, Australia. At that time it was resolved that the Network would seek to:

* collect and monitor distance education activities and study materials;

* promote professional development in nursing and health education via distance education;

* organize a conference/workshop in Victoria by mid 1987.

As the Special Network Coordinator and the convenor of the Distance Education in Nurse Education Workshop, it gives me much pleasure to introduce the Proceedings of the Inaugural Workshop of the Nurse and Health Educators Special Interest Network - proceedings which indicate that the objectives are being realized.

The first paper, 'Efficiency and Effectiveness in Distance Education: The Case for Nurse Education', presented by Professor Richard Johnson, Special Commissioner, Commonwealth Tertiary Education Commission, was an appropriate start to a Workshop in which participants repeatedly expressed a desire to avoid overlap and duplication in the development and conduct of DE programs in nurse and health education. This goal was reinforced by the spirit of collaboration and common purpose among nurses and general educationalists during mini-workshop discussions and plenary sessions.

The significance of distance education in nursing and health education was revealed in many ways during the Gippsland Workshop. At the International Conference of 1985, nurse participants from Victoria, South Australia, New South Wales, Queensland, and Western Australia shared information about present and projected distance education developments in Australia, and learned of nursing and health education programs in Canada and Kashmir. At Gippsland in February 1987, nurses from every state in Australia provided evidence of the expansion of distance education in nurse and health education and illustrated a wide variety of skillful and innovative initiatives such as:

* the use of satellite technology, telecommunications, television, and radio broadcasts;

* the provision of continuing education for nurses and health workers in geographically remote areas;

* the provision of formal award courses in nursing by Universities and Colleges of Advanced Education;

* the establishment of an internationally unique Nursing School of the Air.

The participants' evaluation of both the individual sessions and the workshop as a whole are indicative of its success.

Special thanks are extended to the members of the Workshop Planning Committee:

* Fran Abramowich, Head, School of Health Science, Gippsland Institute
* Tony Barnett, Head, Nursing, Education, Warrnambool Institute of Advanced Education
* Maxine Fine, Literary Editor, Australian Nurses' Journal
* Karen Jones, Centre for Continuing Education for Country Nurses, South Australia
* Anne McMurray, School of Nursing, Curtin University of Technology
* Michael Parer, Educational Development and Research, Gippsland Institute
* Sue Warn, Nurse Educator, Mayfield Centre, Melbourne

for their contributions and to Rae Hill for her invaluable administrative assistance. On behalf of the Special Interest Network, the Planning Committee, and the Workshop participants, I also extend sincere thanks to the Gippsland Institute of Advanced Education for the venue and facilities which contributed in a significant way to the Workshop's success.

Day One

Monday 9 February 1987

4.00 pm Registration - at Main Entrance

6.30 pm Evening Meal in Large Staff Lounge

Chair:

June Cochrane, Executive Director, College of Nursing, Australia and Convenor of the Nurse and Health Education Special Interest Network -

Welcome to Workshop

Dr Tom Kennedy, Director, Gippsland Institute -

Introduction to Speaker

Speaker: Professor Richard Johnson, Special Commissioner for Distance Education, Commonwealth Tertiary Education Commission

"Efficiency and Effectiveness in Distance Education - The Case for Nurse Education"

9.15 pm Workshop Leaders to meet with Dr Parer at supper for briefing in the NORTH partitioned Staff Lounge.

EFFICIENCY AND EFFECTIVENESS IN DISTANCE EDUCATION:

THE CASE FOR NURSE EDUCATION

By Professor Richard Johnson
Special Commissioner
Commonwealth Tertiary Education Commission
(CTEC)

What could be one of the most far-reaching reports on Australian higher education was published last September that is the Review of Efficiency and Effectiveness in Higher Education carried out by a committee appointed by the Commonwealth Government. The report contains a large number of proposals for substantial changes in higher education, and not least with regard to distance education. I would like to tell you something about that report: how it came into being, and the background to its recommendations on distance education, the way that nurse education in the distance mode fits into the framework established by that report and to comment on the developments in this area during 1986. There has been a lot of publicity about the report and about the distance education recommendations, but not all of that publicity has been as well informed as it might be, and I hope you will feel some benefit from being better informed.

The story begins with the 1985 Commonwealth budget. In that budget higher education gained some increase of funds over and above those which had been agreed for the 1985-87 triennium in the budget of the previous year. I hardly need to tell you that increases in any field of Commonwealth expenditure are very hard to get these days and that proposals for increases will always encounter opposition from some quarters. When the Government agreed to those increases in 1985 the Cabinet resolved to see what value the nation was getting from this expenditure and decided that there should be a review of the efficiency and effectiveness of higher education. It is obvious therefore that this report is not simply an educational or administrative document but has a most serious political context. I emphasise this because it is in that context that the recommendations on distance education have been made. The review committee was not seeking, as some of the publicity might appear to suggest, to disadvantage one or other institution or State or to advantage any particular group except Australian students. It was seeking to ensure that higher education in the distance mode in this country is conducted as efficiently and effectively as possible.

I have not encountered anybody in all my involvement in distance education over the last five years who suggested that there was no need for change. There are some 37 providers of distance education in Australian higher education as well as 7 TAFE systems. Twenty-one of those providers offer courses in teacher education; 17 offer courses in business studies, commerce or economics; and all the TAFE systems offer courses in related fields such as accountancy and management. It is extremely difficult to get accurate information on the costs of distance education compared to face-to-face education; program budgeting is not a common practice in the financial administration of our institutions. It is not easy to get assessments of the quality of learning materials or of student support. When the Standing Committee on External Studies late last year offered to fund the development of a statement of desirable standards which ought to be regarded as normal for materials and student service, we received no application from any institution of higher education. Nobody even seems prepared to say that what they do is a reasonable standard for all to observe. We all know that small unit enrolments are a simple way to dissipate resources and the Australian Committee of Directors and Principals in Advanced Education sponsored a study on the numbers enrolled externally in each external unit offered in advanced education.

One institution, the Darling Downs Institute of Advanced Education, supplied us with a statement of costs to produce and deliver a semester unit in a business studies course, and with a statement of the cost of setting up the production facilities and specialist staff of a distance education institution like itself. The semester unit comprised the usual printed materials, introductory booklet, study guide, readings and so on, as well as two audio and two video tapes. The unit was assumed to have a five-year shelf life with one major and one minor revision during that life. The costs included a proportion of the author's salary based on the time which should reasonably be given to developing the course. It included similarly a portion of the salaries of an instructional designer and an editor as well as the costs of word processing, graphics, printing and audio- visual production, warehousing, postage, telephone contact with students, study centres and other student liaison. There was also a figure for the costs of library service, arrangements for student assessment, and the necessary on-campus equipment, buildings and institutional administration.

Most of those costs do not change whether you have 10 students or 500 enrolled in the unit. The author still has to write the unit, the instructional designer, graphic artist, word processing, audio-visual production, equipment, building and the institutional overheads are all still there no matter how many or how few students are enrolled. The printing costs move slightly depending whether you are printing many or few copies, while the postage and telephone costs do move directly in relation to the number of students enrolled. So it is obvious that the more students enrolled in a unit, the more widely the fixed costs are spread, and therefore the lower is your cost per student. In the same way, the more external students an institution has, up to a limit somewhere around 10,000, the lower is the cost per student of the whole printing and audio-visual facility and the central external studies office.

These costings indicated very clearly to the Review of Efficiency and Effectiveness that reasonable economy only begins when the external enrolments in a single unit are 50 or more, up to a figure of about 200, after which economy is maintained but not substantially improved. Similarly the figures indicated that a distance education institution such as Darling Downs, teaching externally across a fairly wide range of subjects needs something over 3,000 external enrolments to spread the costs of its external studies staff, equipment and other infrastructure to an economic level. If anybody wishes to challenge those figures we should be glad to hear from them, but I doubt if anyone can challenge the general approach, since economy of scale is such a familiar concept in any form of production.

It is perfectly clear that these economies of scale are not being achieved and cannot be achieved while 37 providers offer external courses to 49,000 students in higher education, which was the situation in 1986. However this situation did not arise from perversity or blind stupidity. In each institution academics saw the opportunity to cater to people who wished to study but could not come onto campus. They saw also that a course which might be barely justifiable with only face-to-face enrolments could be more easily justified by adding ten external enrolments. Most academics study economies at the level of the semester unit or the department rather than looking for institutional or national economies; and in the mid-1970s, the pressure for economy was not as severe as it is now.

There is now a strong case on grounds of efficiency for reducing the number of providers and the question then arises: who should remain an external provider and who should concentrate on face-to-face provision? Given that there is considerable pressure for admission to institutions of higher education, and that this pressure naturally is felt most heavily in metropolitan institutions where the concentrations of populations are, the review committee decided that as a general principle where it was practicable metropolitan institutions should phase out of external study and take more face-to-face enrolments. Regional institutions such as this Institute, which cannot reasonably expect rapid growth in face-to-face enrolments, should become the main providers of external study so that their numbers will quickly build up to those economic figures I mentioned earlier.

There are some institutions which have special expertise in particular fields, such as agricultural colleges or RMIT. The review committee did not suggest that they give up external study but that they use the more extensive infrastructures of the principal providers, with some contribution to the costs, and thus increase the economy of the operation. Such an arrangement already exists between Hawkesbury CAE and Darling Downs, to the benefit of each institution and of the Hawkesbury College students.

So far I have talked entirely about economies and about greater efficiency. We expect that this will lead to greater effectiveness, that is, to better education for external students. We think it likely that an institution with several thousand external students will put more dedication into its external program that an institution with a couple of hundred external students out of a total enrolment of some thousands. We think it likely that more attractive learning materials and better student support will come from an institution which can economically afford a well-developed infrastructure for external study, than from an institution which is struggling to provide the equipment and cannot provide the range of specialist staff.

We also think - indeed we know well - that it is important to demonstrate, to Parliament, the press and the Australian taxpayers, that the money the taxpayers provide for tertiary education is used as effectively as possible. Taxpayers accept the need to pay taxes for essential services efficiently and sensibly provided, but they resent their money being wasted on unnecessary duplication and low-quality services.

However efficiency and effectiveness do not come about only because of a reduction in the number of external providers and a consequent increase in the number of external enrolments per provider. They can also come about by cooperation between the providers in the development of courses.

I mentioned earlier that we have 21 courses in teacher education on offer around the country. If the 21, or the 17 in business studies, are reduced to 12 there is still a great deal of duplication going on, and duplication means waste of effort and waste of staff time. We are moving to reduce and perhaps to eliminate that wastage, and bless their hearts, the nursing academics are showing us the way.

Nurse education is in a situation in some respects similar to that of teacher education 15 or 20 years ago. The large majority of registered nurses received their professional qualifications through hospital training, just as at one time the large majority of school teachers had a two-year certificate. The basic qualification for nurses in future will be a three-year advanced education award, just as the basic qualification for teachers became a three-year award many years ago. Most of those two-year trained teachers enrolled for an extra year's study to gain the diploma, and very many enrol for a fourth year to gain the bachelor's degree. Of these a very large number enrol externally because they are already in employment and face-to-face study is either impossible or very inconvenient. The same thing seems certain to happen in nursing; a great many registered nurses will seek to get a college qualification and many will seek to enrol externally. It was quite possible that we would have seen 17 or 21 external courses in nurse education just as we saw that many in business studies and teacher education.

To your very great credit, nursing academics, with the sponsorship of the Australian Committee of Directors and Principals, have headed off that waste of resources. As you will all know, representatives from every college already engaged in external nurse education or intending to engage in it have been meeting together through 1986. They have produced a consolidated statement of all the external units on offer or being planned; in this list they have seen where their offerings overlap, they have each seen the ideas of the others, often ideas or units which they would like to adopt. There is no suggestion amongst the nurse educators and there is none from me or the Commission that there should be only one uniform course of nurse education available in this country. It is clear that there are some fundamentally different approaches to nurse education, reflected in a few fundamentally different courses. However the collection of materials available has enabled the nursing academics to preserve those differences and to choose among them, and has enabled them to see course material which is so acceptable that they do not need to spend the effort in preparing duplicate material. Given the pressure that you all work under, every bit of effort and time saved in one activity means you have more energy and time to devote elsewhere in your educational work. This is not an exercise in taking away resources, but in the best use of them. If you don't have to waste time duplicating what others are doing there is more time available for covering specialised areas or for student liaison or whatever.

May I say one word about specialisations? The progress made so far has been in rationalising conversion courses for degrees in general nursing. You will also want in due course to develop external programs in the nursing specialisations. I very strongly hope you show the same good sense and cooperation, and develop those to be shared, without duplication.

This is why I say that the model which has been provided by the nursing academics shows the way to those in business studies and teacher education, and to a lesser extent in applied science where the work of collaborative course development has barely begun. What pleases me in particular is that this progress has come about without heavy-handed constraints or pressures from any central authority but is primarily due to a fine spirit of cooperation among a group of dedicated, professional nursing academics. I would add that it owes its success in no small measure to that lady whom you all know, June Cochrane, who has constantly encouraged the development but who, especially at two critical moments in the process, gently told us male administrators to get out of the way and leave her and the other professionals alone together to sort out their own problems. When we move a little more directly into business studies and teacher education I wonder whether we should try to borrow June for a time!

Comments and Highlights by participants about the Opening Session: Monday 9 February

Many comments about the opening session referred to the development of awareness about cost effectiveness in distance education as a highlight of the evening. Some of these comments were critical of the implications of this - of education becoming a "numbers game", with educational philosophy and quality subservient to political expediency. Others commented favourably on the related implication that avoidance of replication meant better coordination and sharing of resources.

A few referred to traditional educational patterns suggesting that efforts should also be made to rationalise on-campus education, with its dependence on forms of communication which are regarded as "sacroscant".

Orientation to the 'state of the art' in Distance Education was of interest to many, including information on the support of CTEC, and involvement of the CNA in distance learning. Pleasure was felt at the professional approach of nurse educators and concern expressed that the necessary structures be developed to ensure that nurses control nurse education.

Several participants commented favourably on the communication and socialisation involved in the evening.

The question asked by participants was:

Would you please note highlights from the session last night which you found of value to you as a nurse educator interested in distance education.

- Challenging remarks about cost-effective distance education
- CTEC's excessive concern for achieving economics of scale in distance education at the expense of the quality of education thus provided and also without concurrently endeavouring to do the same with on-campus offerings
- A broader understanding of how cost is the major determinant of educational opportunity
- No standards written as yet for distance education.
- Thoughts on economics vs philosophy in Education
- The Costing Factor of external studies vs on campus education
- Cut off point where a program becomes viable ie. 200 students for a unit, 3000 students for an institution
- The design of programs although costly is much more cost effective if used for large numbers of students: not viable for small student groups
- Use of highly qualified personnel to 'oversee' the course = value for tax payer dollar.
- That those involved seemed satisfied with the Australian College of Directors and Principals (ACDP) discussions on rationalisation of Distance Education in nursing
- That Canberra is trying to rationalise the provision of external nursing studies; and that external nursing has a bright future
- Why so much focus on rationalising external studies from Canberra and so little effort to rationalise the on-campus teaching

* Don't replicate courses - is it possible to get national cooperation. Share expertise and resources

* Integration of expertise

* The concept of cooperative input from a variety of people/institutions to produce common quality course packages

* I didn't realise before that such a network of support groups existed for those involved in, or contemplating starting distance education

* Need for coordination in (new) course development. To learn from co-ordinated approach to development of distance nursing education courses

* The overview of where DE has been and where the country is at in this field

* Realisation of the extent to which 'External Studies' is already in existence throughout Australia

* That the Commonwealth Government has a Special Commissioner for distance education

* A supporting network, extensive, exists for the development and maintenance of the distant education mode

* The willingness of more experienced educators to assist the less experienced and so have the opportunity to ask questions of these people

* The assumption that the forms of communication with students with which we have grown up are sacrosanct; that traditional oral presentations are still perpetuated on-campus at the higher education level

* Orientation on three fronts - of GIAE, President of National College, CTEC speaker

* The top people in Nursing and Distance Education found time to come to the opening of this workshop

* To know of CTEC's support for Distance Education in Nursing

* To realise the great interest and diversity of interested people in Distance Education in Nursing

* The lack of knowledge of Distance Education in practice of 'nurse educators' in general, but their interest in learning

* The obviously professional goal orientated approach of Australia's Nurse Educators towards achieving a world standard Distance Learning program

* Nurses should develop and control nurse education

* Meeting other persons with concerns in DE

* The speaker - excellent choice for opening stimulation and provoked discussion, and much thinking for me

* Social interaction before and during dinner was fantastic. Meeting some very kind hospitable people. Socialisation and meeting of new people.

  Lovely meal!

Day Two

Tuesday, 10 February 1987

Chair:

Fran Abramowich, Head of Nursing, Gippsland Institute

9.00 am Peter Smith, President, Australian and South Pacific External Studies Association

"Distance Education Lessons from Yesterday and Today that may help Nurse Education"

9.30 am John Dekkers, Capricornia Institute

"The development of an external degree program for Nurse Education"

10.00 am Dr Helen Connole, Psychologist;
Pat Flynn, Nurse and Lecturer in Professional Nursing;
Anne Lloyd, Nurse and Biologist;
Jane Shoebridge, Nurse and Sociologist;
Elizabeth Sneddon, Nurse/Lecturer in Country Health Nursing;
South Australian College of Advanced Education

"Experience in Developing and Teaching of Nurse Education Courses Externally"

12.30 pm Lunch - in knuckle

2.00 pm **Chair:** Maxine Fine, Literary Editor, The Australian Nurses Journal

Forum Leaders:

Karen Jones, Centre for Continuing Education for Country Nurses, South Australia Anne McMurray, Curtin University of Technology

"Needs Analysis: How to Assess the Needs of Potential Students, Institutions and Nurse Educators"

Aim: to develop a framework for needs assessment for Distance Education in Nurse Education

How does one identify the needs -
- for practising nurses in the field
- upgrading qualifications for tertiary graduate studies
- to assist the remote nurse
- to deliver study skills.

What have others done? Where are the valuable literature areas? Is there a guru in the audience?

4.00 pm **Chair**: Susanne Warn, Mayfield Centre

Dr Michael Parer

Definitions, Theories and Research in Distance Education, and Students Experience of External Studies at Gippsland Institute

6.30 pm Spit barbecue at Morwell National Park. Institute bus and cars departing from Residences 6.15 pm.

9.00 pm Tour of the National Park with the Ranger.

~~DISTANCE EDUCATION:~~ LESSONS FROM YESTERDAY AND TODAY

By Peter Smith

Peter Smith is President of ASPESA - the Australian and South Pacific External Studies Association. He began his career as a psychologist in the mining industry in Western Australia and later moved into education as Head of External Studies at Riverina College of Advanced Education. After a period as Director of External Studies at Capricornia Institute of Advanced Education in Rockhampton he is now Head of the Learning Resource Centre at the Gordon Technical College in Geelong. He has a book being published this year by Croom Helm titled *'Convergence in Education; Distance Education and the Mainstream.'*

SOME HISTORY

It's always difficult and dangerous to try and specify exactly when an event first occurred and what triggered it. To so define usually only prompts other people to try and prove one wrong. Unless one is interested in the history as such, it also doesn't matter too much. Distance education in any organised form appears to have started with the penny post in the mid nineteenth century. At that stage a number of people began posting lesson material out to students and asking the students to respond with their homework. One model developed quite early and still in existence today, is that of simply telling students what they should read in terms of set texts or reading lists, and what date to attend the exam. While arguably a form of distance education, most professional distance educators have cringed at the practice for some decades.

By the beginning of the twentieth century a greater degree of sophistication was starting to emerge and Australia has played a very large part in these developments. The Education Departments of most Australian States set up Correspondence Schools to cater specifically for children in outback areas. These schools were a model for the world, taking a great leap forward in the 1930s with the advent of the pedal wireless and the use of QANTAS to distribute study materials in outback Queensland and the Northern Territory. The schools sector in Australia has continued to be in the vanguard of distance education development.

In the late 1950s the school sector was very active in commencing work with the ABC (which had been active for many years in the provision of educational radio) in educational television. The first known international educational teleconference was organised in the 1960s, between the WA Education Department and that of Alberta, Canada. Intelsat has been used by the school sector for provision of education experiences to children in outback WA. Most recently it has been active in Queensland with the harnessing of AUSSAT for the Mount Isa School of the Air.

In post-secondary education the developments have been slower. The University of Queensland began external studies in 1911 and the various TAFE departments started during the first three decades of this century. In 1955 the University of New England commenced external studies and by 1970 four institutions of higher education were offering external studies extensively. Explosive growth occurred during the 1970s, such that now some 40 institutions are offering external studies in one form or another.

SPECIFIC DEVELOPMENTS IN DISTANCE EDUCATION

The 1970s saw not just a large increase in the number of institutions in the field but other even more important developments. Most significant of these were:

- growth of sophistication;
- increasing enrichment of student experience;
- growth in community participation;
- increase in the esteem in which the products of distance education are held by employers.

Also, during the late 1960s and early 1970s there were some very important technological developments that enabled distance educators to provide better experiences for their students. The offset printing press, resulting in cheap and flexible printing direct from a printed page, has probably been the most important in the development of distance education. Gone were the days of stencil cutting, or cumbersome photographic plate-making processes for graphic or resource material. Photocopying became a cheap and routine form of print reproduction that had the added advantage of being highly decentralised within institutions and within the general community. That has made an enormous impact on the availability of learning material. Audio cassette players started to emerge in the early 1970s as an item of general household ownership, a development that brought with it facilities for high speed tape duplication as well as a confidence among distance educators that they could despatch a cassette in the expectation that their students possessed the equipment to play it. STD telephone was introduced in the 1960s, and steadily grew in distribution across the nation during the 1970s. The increased convenience and more favourable tariffs meant that the telephone became a routine means of long distance communication, either in point to point mode or in teleconference mode.

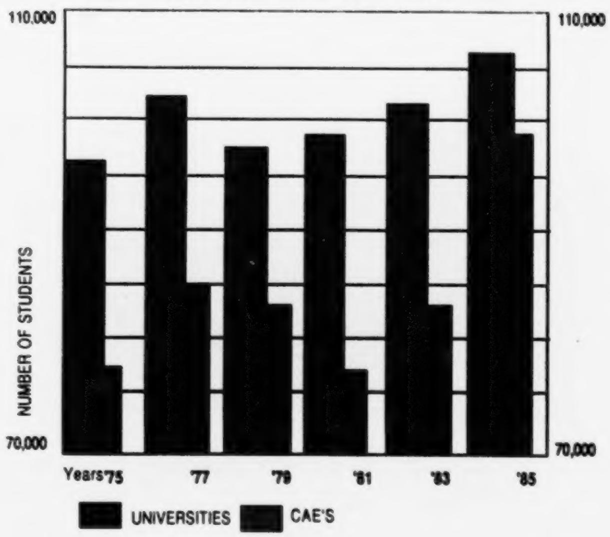
During the second half of the 1970s there was strong growth in the whole enterprise of instructional design. People began to specialise, not just in curriculum development but in the design of instructional materials for distance education. If you think that the bandwagon of distance education in the 1980s is technology, then the bandwagon of the late 1970s was instructional design in print and audio. Bandwagons clearly have their dangers but they are marvellous for lifting an enterprise quickly in sophistication. When the bandwagon moves on, the enterprise has usually profited greatly from its existence.

These sorts of changes in what was available to distance educators enabled the whole enterprise to increase in sophistication and to enhance significantly the experience of the students. Importantly also, it lifted the morale of distance educators such that they became proud of their business and aggressive in promoting it. Gone were the days where the department languished on the edge of the campus or had teachers unfit for classroom duty foisted upon the Correspondence School.

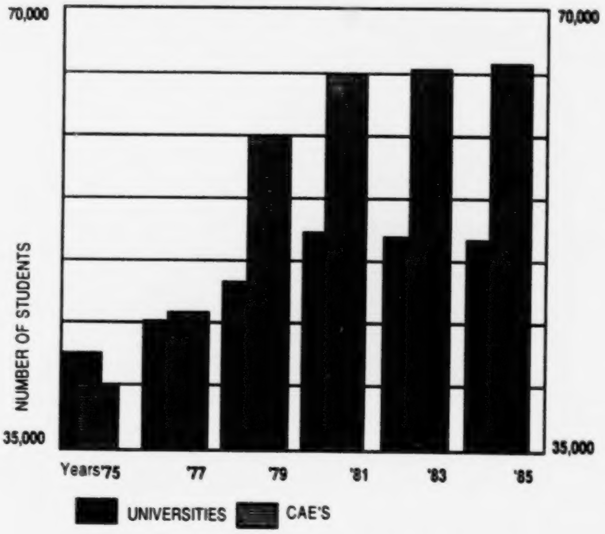
These sorts of developments also led to an increase in the esteem with which employers and the community related to the graduates of external studies. I am not aware of any education authority that any longer feels it necessary to advise on academic transcripts that the study was undertaken externally. I have not heard for many years, although it no doubt happens, of employers who discriminate against applicants who have a qualification gained by external study.

A final development I would like to discuss is the increased interest in distance education from the community at large. The following Figures 1 to 3 show the increase in student numbers in higher education since 1975.

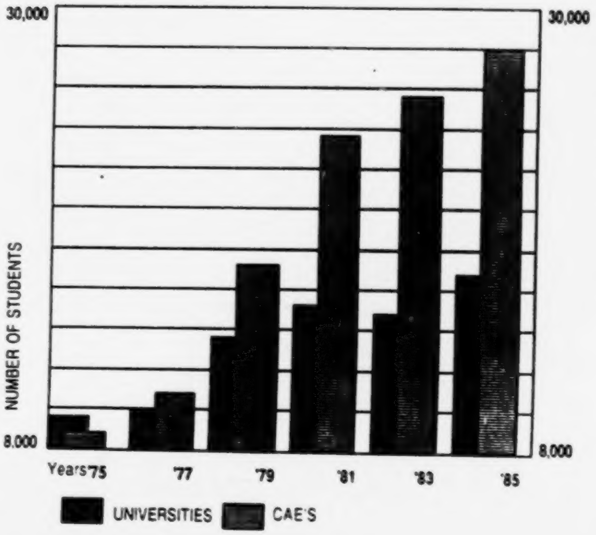
HIGHER EDUCATION ENROLMENTS -- FULL TIME



HIGHER EDUCATION ENROLMENTS -- PART TIME



HIGHER EDUCATION ENROLMENTS ---- EXTERNAL



During the 1950s a typical part-time student attended an inner city institution after work for some hours of lecture or tutorial and library study. That was before television, before widespread affluence and before people became so concerned about being abroad in the city at night. The alternative of 'correspondence' study was a poor one indeed. Availability was not good. Notes were very often those handouts given to on-campus students, stapled together with advice to read the textbook and come to the examination.

During the 1970s people became able to participate in a greater variety of leisure time activity and it became more distasteful to battle ever-growing traffic and find a parking space to attend night lectures. The alternative of distance education became more attractive since it allowed a flexibility that fitted well with modern lifestyles. Distance education meant that a student could go home after work, play with children, watch TV, maintain a social and community life, and timetable study to fit with these other demands. This alternative also became more interesting in terms of the scope and variety of course offerings available through the Colleges of Advanced Education.

Additionally, as Johnson identified, the changing status and aspirations of women have added to the growth of distance education. Johnson was able to report in his study that in 1981 women comprised 49.3% of distance education students at University level, while only 42.2% of on-campus students were women. In the Colleges of Advanced Education women represented 47.2% of distance education students and 48.4% of internal students.

The evidence for the increasing popularity of distance education lies in the fact that all Australian distance education providers at the post secondary level report that between 40% and 60% of their students reside in the capital cities. These capital cities are each well endowed with institutions of higher education, where without travelling very large intra-city distances, students may attend on a part-time face to face basis.

SOME CONSTRAINTS

The first constraint facing distance education is to be taken very seriously and planning must take account of it. That is finance. Distance education varies from face to face instruction in its cost structure. The operating costs of distance education programs have a far higher fixed component and a lower variable component. There is considerable overhead in support staff, printing and other equipment and materials production costs, and these costs tend to be fairly fixed. In the face to face situation there is much greater scope for capitalising on the variable costs.

However if we were to put all costs into the equation, such as buildings and under-utilisation of teaching staff when numbers are less than optimal, it is unlikely that distance education is more expensive. But, whatever the case is, in planning a distance education program, it is wise to look closely at the fixed costs.

One of the mistakes made in Australian distance education at all levels has been the desire to reinvent the wheel. The number of introductory accounting, mathematics, science, etc., courses that have been developed is frightening. It is always argued strongly: "...that our accounting, or biology, is different and better than theirs." We should have resisted those sorts of arguments and spent more time developing better courses and learning packages on a co-operative basis. That can occur by groups of institutions working on the same material, although I suspect that to be largely impractical. What is more practical is for a curriculum to be split into its component parts and different parts developed in different places according to interest and expertise. A cooperative team of moderators would need to ride shotgun over the development, but that shouldn't be hard. Not hard but for some reason apparently unachievable.

One of the constraints on distance education has been, and still is to a lesser degree, that of lack of imagination on the part of educators and their administrators. Many cries have been heard over the years that various things cannot be taught by external study. We have heard it about science, about engineering, about law and about nursing, just to mention a few. Then someone has done it and done it successfully. It can be hard to do it well and it is different from what may have occurred on campus. But invariably it has worked. What it required was the imagination to see that it can be done and the imagination to develop quality learning materials and student experiences to enable it to be done effectively. Slowly that constraint is being overcome, with the increasing status of distance educators, their new-found aggression, the technologies at their disposal, and the response of the learners. The moral here is: "Never believe it can't be done - believe that it can and work on it." You have probability and past experience on your side.

I have a belief that so far distance educators have only used distance education techniques and the attendant technologies to turbo-charge the horse-and-buggy style education system that we inherited from the developments of the nineteenth century. I have recently given a paper on the theme in Perth, and will spare you a repetition of it. What I am getting at though, is a major constraint. Education first began very informally where groups of people, or even individuals, formed a relationship with a person who had something to teach them. The Socrates model. Skipping over a few hundred years we find the same sort of thing happening in the Middle Ages where the clergy, who had access to books and who could read, gathered people together and read to them. In a society with poor literacy and poor learning resources that was a sensible learning delivery mode. In other words an appropriate response.

Wardle (1974) describes the history of formal schooling in England. Starting during the industrial revolution and continuing after it we saw the need for increased literacy and numeracy and a greater concern for social justice. The educational response at that time was again appropriate, was an extension of the previous model and of course was a mass extension of the already existing church and community run schools. The response was to collect children together into school buildings and to appoint teachers. The first government run Departments of Education, or Public Instruction as they were called, were formed in the second half of the nineteenth century. One of the results of that was the formation of teachers unions and, together with management practices in education authorities, teachers' working conditions started to be defined in terms of class size and contract hours. Added to that was the need to grant holidays during the traditional summer harvest time when children were required to assist on the farms, and the need to grant holidays for the religious festivals of Christmas and Easter. Thus evolved a three term system, based on face to face instruction given to groups collected together in the one place at the same time. We still adhere to that model.

My point here is, though, that we must not stop at using technology to translate the traditional education model into an external form. If we are going to make rapid response to education and training needs; if we are going to follow seriously access, equity and participation objectives; and if we are going to lower the unit cost of education, we need to change. We can now use technology to escape from the traditional model and offer forms of education that:

- allow much greater learner control of what is to be learned and how, when and where it is to be learned;
- allow more rapid response to training and education needs in society;
- do not have a cost structure that is linearly related to the participation. Packages and resources can be developed and then amortised over a large number of participants and a variable length of time.

Technology and distance education thinking and techniques allow us to largely free institutionalised education from the constraints of: where it is learned; how it is learned; by whom it is learned; what is learned; when it is learned.

I am certainly not advocating here that there be *no* constraints. Clearly in many circumstances, particularly those where the learning results in an accredited award, there have to be constraints. But I am advocating that we examine closely which constraints we place upon learning because we find the constraint convenient (eg. where, when, how); and which constraints we place on learners because we cannot tolerate a situation where there are not *rules* in which we put our faith (eg. admission criteria that apply as blanket rules). Once we have examined those constraints let's make them as liberal as we possibly can while at the same time maintaining integrity as professional educators. In other words, our attitude should be to make learning open and only have minimal constraints where they are necessary, rather than have constraints that we only relax when it seems convenient or 'respectable' to do so.

Distance educators seem to be able to think that way now. Many other educators can too. The TAFE system in Australia seems to have been most able to grasp that concept and is moving quite rapidly towards it, motivated by political realities such as access and responsiveness to industry needs. In higher education though, those concepts are much more difficult to apply. We have a funding system still based on face to face instruction and still locked into the notion of specific semesters and predetermined student progress rates. It would be a brave institution that tried to buck that system too hastily.

The CTEC report on effectiveness and efficiency in higher education displays a very narrow view of education and the role that distance education and resource based learning might play in the spectrum of activity. It is really only interested in neatening up and making more cost effective what we have now. That is unfortunate at a time when so much is at our disposal to achieve so much more.

A bright spot on the horizon, among many bright spots, is the increasing use of distance education and resource based learning in professional continuing education and staff development in industry and commerce. That is an area that is already being recognised in nurse education and paramedical education and training. It is probably through that sort of application that distance education will achieve a reduction in the currently artificial constraints.

A BRIEF LOOK AT THE FUTURE

Effective use of new technologies can lead to a situation where the remote student can communicate with an institution, fellow students, teachers, and learning resources as effectively and as intimately as a student on campus. Additionally, more and more of this sort of communication and resource access will be utilised by on-campus students. Already we have seen a blurring of the boundaries in terms of administrative, teaching, and resource delivery practices. It is my contention that this blurring will be speeded up by effective use of new technologies, such that current distinctions will become irrelevant. There is some evidence (Cox 1985) in densely populated countries that this is happening already. Cox's observation was that tele-education is not much concerned with the off-campus student population, but is taking the form of extensive networking between well established centres of learning, effectively resulting in tele-education being an on-campus activity.

A very good example of this sort of development in Australia is the Sunraysia Project proposed by the Victorian State Working Party on Telecommunications Networking for Tertiary Education (1985). The Sunraysia Project is a satellite-based communication network linking a number of institutions across the three sectors of post-secondary education, to provide teaching programs and resources to the Sunraysia College in Victoria's remote north-west. Essentially the link will be used to provide on-campus instruction and resources, although a major extension of the Project is also associated with distance education. At the same time the network is designed to allow instruction and resources to be shared across the institutions within the network in much the same way as discussed by Cox. Within the network proposed as Stage 1 of the Project, only the Sunraysia College is geographically remote. Two of the other four institutions are in Melbourne while the remaining two are in Geelong, an industrial city of 160,000 people 70 kilometres from Melbourne.

The Interlink Project in Melbourne (Richardson, 1986) is another example of the use of telecommunications to provide campus based instruction. The Project is to explore decentralised access to vocational training and the use of communication technologies in course delivery. It is planned to offer a number of vocational courses at six local learning centres in the outer eastern suburbs of Melbourne, using a combination of teleconferencing, facsimile and data communication. The learning resources and instruction will emanate from a number of established technical (TAFE) Colleges.

The concept of open learning (Lewis 1986) is important in assessing the future. Quite clearly the vocational employment pattern in Western society will change substantially by the year 2000. Data collected by Australia's Commission for the Future indicate that there will be very substantial growth in the percentage of the workforce employed in such service industries as:

- recreation, personal and entertainment services;
- education, health and community services;
- finance, property and business services.

The same data indicate a decline in the percentage of the workforce employed in:

- wholesale and retail trade;
- manufacturing;
- agriculture, forestry, fishing and hunting.

Clearly, education and training in the declining workforce percentage areas will be necessary for personnel replacement purposes and, of course, the increasing absolute numbers (not percentages) of people employed in these industries. But the education and training needs in the increasing workforce percentage industries will be quite massive. It is doubtful that without massive increases in capital and recurrent expenditure the traditional forms of education delivery will be able to respond rapidly enough to the training and retraining needs. Part of the interest in open learning in Australia is attributable to that recognition.

It is unlikely in my view that the concepts and methods of resource based learning, of which open learning and distance education are two examples, will remain on the fringe of post-secondary education systems. Already the Sunraysia and the Interlink projects are local examples in support of this view. We simply cannot afford to ignore or under-utilise a form of instruction that allows us to break away from high cost classroom construction, from almost total under-utilisation of all educational resources at certain traditional times of the year, and from a recurrent cost structure that is linearly related to the number of students under instruction but, in reality, has very high fixed costs.

What is more likely is that these concepts and methods will be embraced more and more by on-campus educators as they grapple with community demands in terms of student numbers and rapidity of response to education and training needs. Furthermore, the demand for access to education from hitherto educationally disadvantaged groups will continue to grow and the resource based learning response can assist in meeting those demands. An additional pressure for education and training in Australia which is not atypical among Western economies is that although we have experienced higher percentages of unemployment over the past 10 years, we have also experienced higher percentages of employment at the same time (Cleary, 1985).

The effective use of new technologies in education will, it has been argued in this chapter, generate a momentum of its own towards the convergence of on-campus and off-campus education in terms of teaching strategies and delivery methods. If I am correct in predicting that resource-based learning will become a major force in addressing the sorts of pressures that are being experienced by educators now and that will continue to be experienced at least during the remainder of this century, then I would predict that this convergence will be more rapid and the end points of convergence will be closer together.

While the face to face mode of instruction continues to exist in post-secondary education (and let us sincerely hope that it always does) there will never be a total convergence. There will always be opportunities for different teaching strategies to exist in the face to face situation and these should be capitalised on wherever appropriate. But there is little question that a convergence will result from the sort of resource based learning new technology can yield, and the sorts of pressures to which education must continue to respond. Such a tendency towards convergence will also result in an educational response that is appropriate in the closing years of the twentieth century - as appropriate as a classroom instruction based response was in the closing years of the nineteenth century.

REFERENCES:

Cleary, M. 'Manufacturing - a future?', *Questioning the Future*, Occasional Paper No.1, Commission for the Future, Commonwealth of Australia, 1985.

Johnson, R. *The provision of external studies in Australian higher education*, Canberra, CTEC, 1983.

Lewis, R. 'What is open learning?',*Open Learning,* June 1986, 5-10.

Richardson, L. *Technology, Access and Participation in Vocational Training*, Interlink Executive Summary, Office of the TAFE Board, Melbourne, 1986.

Victorian State Working Party on Telecommunications Networking for Tertiary Education, *The Sunraysia Project*, Sunraysia College of TAFE, Mildura, 1985.

Wardle, D. *The Rise of the Schooled Society: The History of Formal Schooling in England,* Routledge and Kegan Paul, London, 1974.

THE DEVELOPMENT OF EXTERNAL DEGREE COURSE FOR NURSES AT CAPRICORNIA INSTITUTE

by John Dekkers, Capricornia Institute

John Dekkers has a PhD and an Msc in Chemistry and is Director of Textual and Continuing Education at Capricornia Institute of Advanced Education, Rockhampton. He is a former Head of the Science and Mathematics Education Centre at WAIT and developed a Masters of Applied Science in Science Education as an external program. He has supervised four Masters students in Nurse Education.

Introduction

Capricornia Institute is a multidisciplinary regional college of advanced education. It mainly serves Central Queensland but it also draws students from the rest of the State, as well as from other states and overseas. External studies became available at Capricornia Institute in 1974 and have expanded to a stage where in 1987 each of the five Schools within the Institute offers externally accredited courses. At present the Institute has a total of 17 courses (312 external subjects catering for 2,035 students).

The Bachelor of Applied Science (Nursing) course is the most recent external degree course to become available. The course is at present only available by external study. It takes 4 years to complete and for 1988 will have an intake of approximately 70 students. The course is generalist in nature, designed to facilitate the application of new and extended knowledge, attitudes and skills in the provision of nursing care. It is intended to prepare nurses for increased responsibility, accountability and leadership roles in their areas of nursing practice. Entry into BAppSc (Nursing) at Capricornia Institute is available to currently registered nurses in non-metropolitan Queensland with a recent period (minimum of 1 year) of employment as a nurse, and entry is by direct application to the college.

Course Structure

The course consists of nursing subjects, specialist support subjects and a choice of electives from nursing areas. This range of subjects is aimed at strengthening the theoretical base of nurse practice and providing a general academic background similar to that of other health professionals at the degree level. Further course details are available from Capricornia Institute.

Development of Study Material

Across different tertiary institutions a diversity of approaches is being used in the development of instructional materials. However, it is recognised that if high quality educational materials are to be produced, a number of recognised developmental elements need to be adopted. Crucial developmental elements used in producing instructional materials for the nurse education course at Capricornia Institute are detailed in the remainder of this paper.

1. Use of a team approach to plan and develop courseware

It is well recognised among distance educators that it is nearly impossible for any person to prepare high quality instructional materials on his/her own. This has led to the adoption of a team approach to the development of materials. Typically a team consists of the following personnel:

- **the writer** - this person, usually a lecturer, is given the task to prepare materials;
- **content specialist** - This person's main task is to verify content and assist the writer in the structuring of materials in the appropriate sequence etc;
- **an instructional designer or course development specialist** - this person's main task is to assist in textual design, layout and to provide advice in the use of the most appropriate instructional courseware;
- **an editor** - this person provides input into matters such as consistency of presentation, writing style, grammar etc.

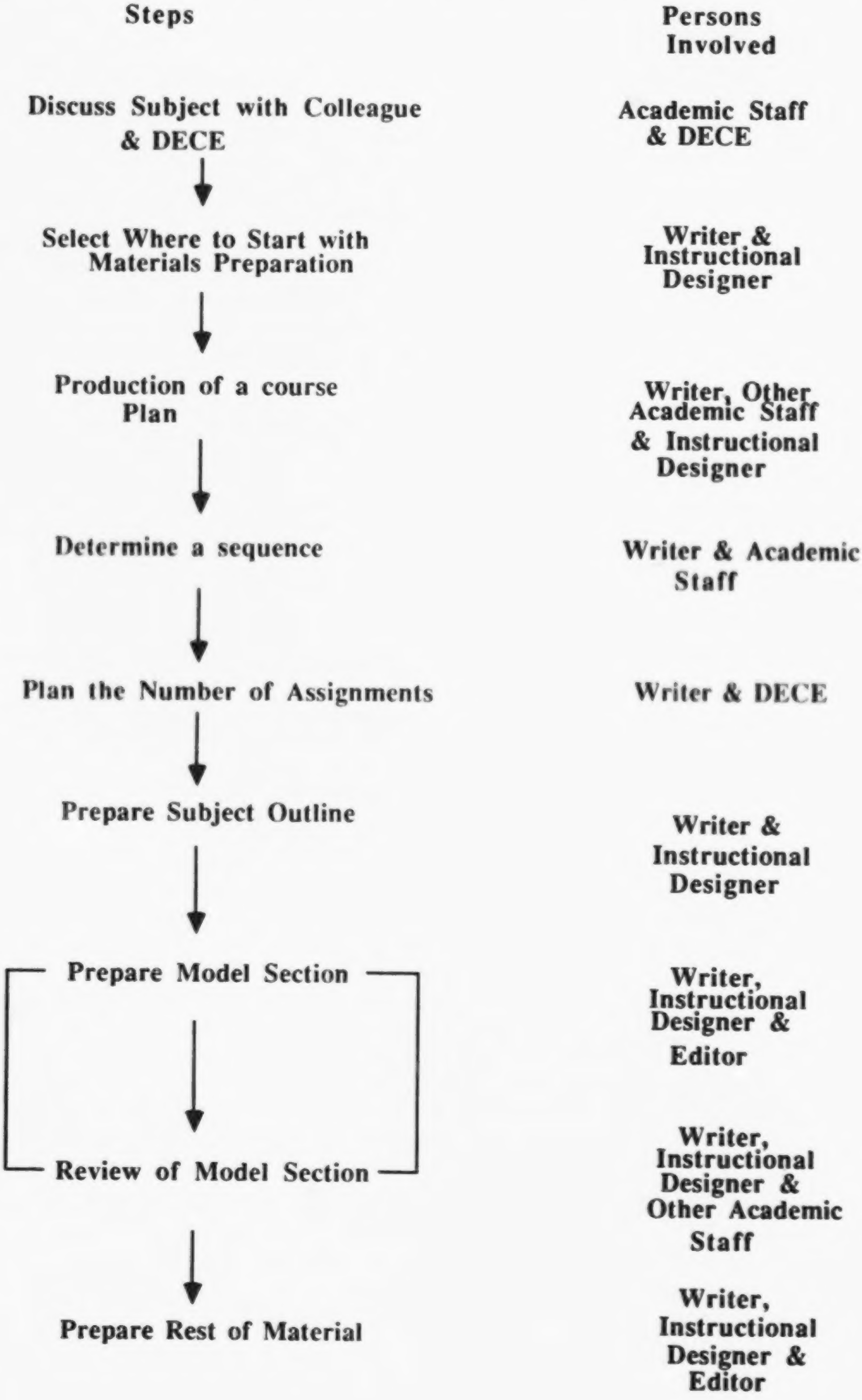
At Capricornia Institute the development team consisted of the following persons:

- writer, a lecturer in nursing;
- content specialist, another lecturer in nursing at the Institute;
- instructional designer and editor who were both from the Department of External and Continuing Education at the Institute.

The initial task of the team is to prepare a model section of study materials for the subject. These meetings were held frequently and regularly and the steps typically involved in this processs are presented in Fig 1. Once the model section is prepared the team then only meets occasionally when the need arises.

Figure 1

STEPS IN COURSE PLANNING & PREPARATION OF A MODEL SECTION



Steps	Persons Involved
Discuss Subject with Colleague & DECE	Academic Staff & DECE
Select Where to Start with Materials Preparation	Writer & Instructional Designer
Production of a course Plan	Writer, Other Academic Staff & Instructional Designer
Determine a sequence	Writer & Academic Staff
Plan the Number of Assignments	Writer & DECE
Prepare Subject Outline	Writer & Instructional Designer
Prepare Model Section	Writer, Instructional Designer & Editor
Review of Model Section	Writer, Instructional Designer & Other Academic Staff
Prepare Rest of Material	Writer, Instructional Designer & Editor

2. The writer needs to have an appreciation and understanding of learning at a distance.

The writer should have a working knowledge of the learner's working environment and of the teaching strategies and resources that can be incorporated in the preparation of courseware. In preparation of instructional materials for the nursing course, aspects that had to be taken into account included the following:

- * Queensland is a highly decentralised State with some very remote places;
- * whilst most students are a long distance away from campus, all students generally had ready access to a telephone, and audio and video tape recorder/player. Also a high percentage of students had access to a microcomputer;
- * external teaching utilises a study centre, network residential schools and teleconferencing.

At Capricornia Institute, all staff involved in distance education are informed about the above aspects and other facets of teaching/learning at a distance. An in-house publication, *Distance Education at Capricornia Institute - A Guide to Lecturers*, assists in the preparation of study materials. This publication is used as a basis for workshops and meetings to consider particular aspects of distance education.

The teaching strategies and resources used at Capricornia Institute for distance education are presented in Figure 2. Initially, as with the development of materials for the nursing course, the focal learning resource is print material supported by audio tapes. Subsequent revision of materials can result in the addition of other courseware e.g. videotape, CAL packages etc

FIGURE 2

EXTERNAL TEACHING STRATEGIES AND RESOURCES

• Study Guide and Readings	Resources
• Audio-Visual Materials	
• Library Resources	
• Home Laboratory Kit	
• CAI Materials	
• Outreach Visit by Academic Staff	Strategies
• Telephone Tutorials	
• Study Centres for Study and Self Help Groups	
• Residential Schools	

3. An instructional model as a framework for the preparation of materials.

In the development of courseware and in particular print materials, a number of assumptions are made about the learner and his/her learning environment. Two important general assumptions that are made in the development of print materials are that the learner is an independent learner and that learning must be an active process. An Instructional model developed by Gagne, as shown in Figure 3, comprehensively details events or instructional elements needed for a learning segment and helps ensure that the above assumptions are incorporated in the development of materials. The model, which subsumes elements of other models, is very appropriate for use in the development of distance education materials.

FIGURE 3

GAGNE'S NINE INSTRUCTIONAL ELEMENTS FOR A LESSON SEGMENT

Gaining Attention

Informing the Learner of the Objectives

Stimulating Recall of Prerequisite Learnings

Presenting the Stimulus Material

Providing Learning Guidance`

Eliciting the Performance

Providing Feedback about Performance

Correctness

Assessing the Performance

Enhancing Retention and Transfer

The lecturer guide referred to above provides details and examples of each of the nine instructional events that should be used in the preparation of external learning materials. For each element checklist questions are presented which enable the writer (lecturer) to determine whether the element is present in a suitable form.

4. Planned lead-up time for the development of materials.

It is commonly accepted that the total process of preparation and production of study materials takes up to 1 year. Typically, approximately 6 months needs to be set aside for the planning and writing of materials and a further 3-4 months to process and print the materials. These were the time lines required to prepare nurse education materials at Capricornia Institute.

EXPERIENCES IN DEVELOPING AND TEACHING NURSE EDUCATION COURSES EXTERNALLY

SACAE - STURT TEAM

Helen Connole, Pat Flynn, Anne Lloyd, Jane Shoebridge, Elizabeth Sneddon

INTRODUCTION

We are a team of five members of the School of Nursing Studies at the Sturt site of the South Australian College of Advanced Education (SACAE-Sturt). In presenting our collective 'experiences in developing and teaching nurse education courses externally' we want to say something of the context in which our external courses are derived and taught; and something of their history. We want to state the purpose we think they serve and the principles we have derived along the way.

We have divided our presentation into four parts. The first part describes the history of tertiary nursing education in South Australia. In the second part we tell the story of our early experiences in teaching two tertiary programs in the external mode: a specialist program in community health nursing and a comprehensive conversion program for general registered nurses. Having acknowledged the valuable lessons learnt from these beginning experiences, we then describe the next phase in our development. This has been a period of dramatic change to our courses and our College, and we show how we were able to manage the change, further develop our external courses and maintain and strengthen the educational philosophy we had derived. Finally, we illustrate these principles with examples from our diploma program of nursing studies for registered nurses.

The context for our work and the work of the most of our students is South Australia and its environs. This can include the Northern Territory, especially the Centre, Broken Hill and sometimes the western district of Victoria. Geographically Adelaide is situated on the large Gulf of St Vincent, forming what is really the west coast of Eastern Australia. The sun rises over the Adelaide hills and vineyards and sets over the water. Culturally South Australians, and especially Adelaide's Athenians, are now of two kinds: those for the Grand Prix and Casino and those against. Early November sees an exodus from inner Adelaide to the sancturary of 'Not-the-Grand-Prix-Picnics'.

THE HISTORY

The nursing profession in Australia talked about the idea of tertiary nurse education for decades before its leaders reached sufficient consensus to begin concerted action for change.[1] By the late 1960s they were organised and in earnest. In 1968 the College of Nursing, Australia, invited a World Health Organisation consultant Dr. Rae Chittick, to report on the state of nurse education. Her comments were pungent :

> Perhaps no other group of young people in modern society receives such a narrow, restricted and unimaginative type of education.[2]

The report prompted urgent action from senior nurse educators in Australia. This action coincided with the general expansion of the Colleges of Advanced Education at that time, and especially under the Whitlam Labor government with the pressure and opportunity for single-purpose colleges to diversify.

In the south of Adelaide, 20 minutes drive from the city centre and nestling in the Adelaide foothills, the Sturt College of Advanced Education (formerly Bedford Park Teachers' College and a single purpose CAE) planned to diversify first into health and then welfare. The decision on health coincided with the action plan of South Australian nursing leaders and also with the establishment of the nearby Flinders Medical Centre. The Medical Centre was to be a teaching hospital of the recently opened Flinders University of South Australia and its medical school.[3]

Negotiations began in 1973 and the first pre-registration tertiary nursing course began in South Australia at the Sturt CAE in 1975 with a particularly important agreement between Sturt, the Flinders Medical Centre and the University. The students of the Sturt diploma course in nursing would have access to the facilities of the Medical Centre for their clinical experience, just as the students of the Flinders degree course in medicine would have access. It was an interesting beginning with the opportunity for student nurses and student doctors to at least commence their careers as equals.

At that time the Sturt CAE comprised two vocational schools: a School of Health Professions and a School of Teacher Education. The School of Health Professions consisted of four departments - two of nursing, and one each of radiography and speech pathology. The two nursing departments developed and ran very different kinds of nursing awards: one, a comprehensive award at diploma level and the other, specialist awards at diploma and degree levels (see Table 1).

TABLE 1
S.A. TERTIARY AWARDS IN NURSING - STURT C.A.E.

COMPREHENSIVE AWARD -

- **pre-registration**
  Diploma of Applied Science -
  Nursing
- **post-registration**
  Diploma of Applied Science -
  Nursing - Conversion

SPECIALIST AWARDS -

- **post-registration:**
  Diploma of Applied Science -
  Community Health Nursing
  Nursing Management
  Psychiatric Nursing

  Diploma of Teaching -
  Nurse Education

  Bachelor of Applied Science -
  Nursing

  Bachelor of Education -
  Nursing Studies

The comprehensive award comprised two programs. A pre-registration program began in 1975 and by 1980 had become the largest in Australia. Its cognate conversion program was offered to registered nurses who had trained in hospital schools of nursing. It began in 1976 and quickly became a course in great demand.

The specialist awards began with diplomas in Nurse Education and Community Health Nursing. We subsequently developed awards in Nursing Management and Psychiatric Nursing. At the same time the School of Teacher Education offered a degree with specialisation in Nurse Education. It was against this background of substantial involvement in tertiary nursing education that our external courses emerged (See Table 2).

TABLE 2
EXTERNAL STUDIES IN NURSING - STURT C.A.E.

COMPREHENSIVE AWARD -

- **post-registration**
  Diploma of Applied Science (Nursing)
  Conversion

SPECIALIST AWARDS -

- **post-registration**
  Diploma of Applied Science
  Community Health Nursing
  Bachelor of Education
  Nursing Studies

EARLY EXPERIENCES IN DISTANCE EDUCATION

Community Health Nursing

In November 1978 the College entered into an arrangement with the South Australian Health Commission to offer an external version of the community health nursing course to country nurses within the State. The arrangement was for six years and the external program was to consist of the same course structure as the accredited internal program.

We had considerable support for our first excursion into the field of distance education. The Health Commission supplied an annual grant to cover teaching and clerical expenses, equipment and travel. Students' travel expenses to and from on-campus workshops were reimbursed and their accommodation in Adelaide was provided. A clerical officer was appointed to work exclusively with external students.

We decided to adopt the same team teaching approach as in the internal program and the course teachers worked in both programs. The teaching method aimed to initiate and maintain group processes of learning. Because we wanted students to meet together, we decided applicants living within reasonable geographical distance from each other should be sought. A viable group size was considered to be between five and eight people and we began with four such groups in February, 1979.

The program of study was arranged over six semesters to give a course duration of three years. In those days each semester was 20 weeks long. Ten days on-campus time was required in each semester, some of which was used for community placements. The workshops conducted at Sturt were designed to introduce beginning students to tertiary study and to the resources available to them. The development of group and communication skills was an integral part of all workshops.

The live-in nature of the workshops undoubtedly aided in the development of group cohesion and support. The fact that the travel/accommodation budget was a 'bit tight' meant that the accommodation provided was of the sort that ensured students got to know each other very well, very quickly. We found that individuals soon learnt to value their own resources and the resources of others. On the whole, after a couple of workshop experiences, students were able to challenge each other (and us) in a way that promoted learning and growth. They also had a lot of fun and so did we.

Each small group met in its own regional area at least once fortnightly. Each made its own arrangements about the venue and the use of equipment, such as film projectors. The equipment grant enabled us to purchase a porta-pak video for each group and this proved invaluable for the development of interpersonal skills. The course material was arranged into fortnightly packages. In consultation with the groups we organised timetable and delivery schedules and our clerical officer made sure that the right package got to the right group at the right time. Each package contained tutors' feedback from the previous meeting, activities for the current meeting, pre-reading and assignments for the next meeting. Groups reported on the outcome of each meeting and this feedback was sent to the College within two days. This allowed tutors to make their comments and suggestions and to organise the activities for the next learning package. Generally feedback was given on audio-tape.

Each group had access to a librarian who provided the reading requirements, handled the students' requests and informed them of new accessions to the library. External students were allowed a four-week borrowing period and each group had some reference material on loan for a full semester. A number of journals was circulated among the groups as an ongoing activity.

Students were encouraged to comment on the course content and method. We became aware that the difficulties of reorganising activities at work, at home and in the community to allow for study were more acute for external than for internal students. While the program made more demands on staff than had been originally anticipated, and despite the fact that our mode of operation clearly followed a 'just-in-time' model, we were generally pleased with our performance. Feedback from students was positive. They persistently commented on the relevance of their study and were very supportive of the way the course was offered. Our team learnt a great deal about teaching and about trust. We developed a deep respect for country nurses and their abilities and became much more aware of their needs. One comment from a student about the needs of country nurses for further education is worth quoting:

If the external course had not been available I would not have been able to do these studies. I would not have been able to improve my knowledge and skills, and so in turn offer members of the community in which I live and work a better standard of care. It is a means of offering country people a standard of community health care that those who live in the city have - or at least have the opportunity and resources to seek out. In the country, options and choices are few and in some cases non-existent. Thank God for external studies!

Conversion Course

Early in 1980 it was decided that the conversion program should be offered to external students in 1981. This decision was made largely in response to documented demands from country nurses. We recognised the need for country nurses to be given the opportunity to up-grade their hospital qualifications. However the immediate response of most of the academic staff teaching in the internal conversion program was that to adapt our current course to the external mode would be a formidable task. This was because the internal program relied considerably on student-staff and student-student interactions. Student contributions had proved to be extremely influential in the development of the course. The students came from varied professional backgrounds, many of them experts in their fields. Their expertise provided an invaluable resource that could be shared in the classroom.

We talked at length with other people both on and off campus who were involved with external teaching. (At that stage there was no external studies department at Sturt College.) We consulted with colleagues who were or had been students studying at a distance. These conversations were most illuminating since they highlighted the importance to students of clear instructions and rapid and constructive feedback. They also provided us with valuable comments on the nature of materials. Attendance at conferences organised by International Council for Distance Education (ICDE) and Australian and South Pacific External Studies Association (ASPESA) brought us into contact with a new world of people enthusiastic about external studies, distance teaching methods, resource availability and problems encountered by external students.

A significant amount of time was spent discussing who we thought our clientele would be and accordingly the adaptations we would have to make. There are obvious problems common to all students studying at a distance. These relate particularly to isolation and the limited availability of resources. We recognised that we would be dealing with a unique group of people. Our experience in the internal program was that tertiary study was new to virtually all students. Most of them had come through a rigid hospital training and found some difficulty with self-directed learning and with questioning and evaluating their own practice. We expected that this would also be the case for external students. We knew that the majority of our intake would be women and expected (as evidenced by enrolments in the Community Health program) that many would be responsible for maintaining the household, child rearing and assisting on properties (this being seasonally determined). In addition to their home activities many would be active in their communities. In relation to professional commitments we appreciated that many country nurses were 'on call' 24 hours a day, an additional responsibility and pressure that few metropolitan nurses have to contend with. We anticipated that some students would face active opposition from spouses and colleagues and would feel guilty about dropping their community activities and we indeed found this to be so.

In order to accommodate the needs of our students we decided to extend the length of the course and include a compulsory on-campus week at the beginning of each year of study. This time would be used to introduce students to tertiary study skills including problem solving, group processes, open lecture discussion, some didactic input, laboratory work and report writing as well as social activities. Despite the fact that many students had to travel great distances to attend, evaluation overwhelmingly indicated that they found this on-campus time to be stimulating and of great benefit.

It was decided that while units should be prepared for students as individual learners they should also be encouraged to work in groups and in the first year selection was made on this basis. Teaching teams drew up unit outlines and prepared draft materials. We organised several workshops (with invited outsiders) to discuss resources, look at other materials and monitor our progress. Most teachers opted for written materials supplemented by readings and audiotapes. A librarian maintained close liaison with staff and developed particular expertise in working with external students. We employed an administrative assistant to be responsible for typing layout of materials, posting, record-keeping, organising on-campus weeks and numerous other activities. It soon became apparent that she was the anchor of the course. Through her, students had a direct link to the college and she was someone they could talk to, academic staff being notoriously difficult to catch. She was, and still is, an invaluable member of the team. An after hours phone was installed since we recognised that many of our students would be studying at night.

Information about the course was sent to all Directors of Nursing and Hospital Administrators. Interestingly some of our applicants never saw this information and applied in response to newspaper advertisements. Since those early days support for our external courses has grown and demands for more places and diversity of courses increases.

Conclusions

As we hope we've shown, the organisation of our first external programs had many similarities and some differences. The Conversion program relied on pre-packaged materials and aimed primarily at individual students. The Community Health program (because of the nature of community work, particularly at that time) concentrated on group learning and this made the geographical location of students more important. In both instances, the external programs reflected the aims and content of their internal counterparts. Both attempted to meet the needs of the target group and the demands of the curricula. Both tried to develop and maintain open dialogue between staff and students. This was not purely a stylistic preference but an attempt to mirror the nature of nurse-client relationships. Both programs attempted to reduce the isolation of students by providing mechanisms for them to share their ideas and experiences.

In summary, we found that:

* our teaching practice was enriched by the external experience. (Perhaps the best way to teach is to prepare first for distance learners?)

* the essential and most vital teaching resource is the teacher

* country nurses are subjected to social pressures that are generally more intense than those experienced by metropolitan students. We believe they need support not only from staff but perhaps, more importantly, from each other. We found that in their first experience of tertiary education, country students initially had low self-esteem and often operated under the assumption that nurses were somehow to blame for everything that wasn't working in the health care system.

MANAGING CHANGE

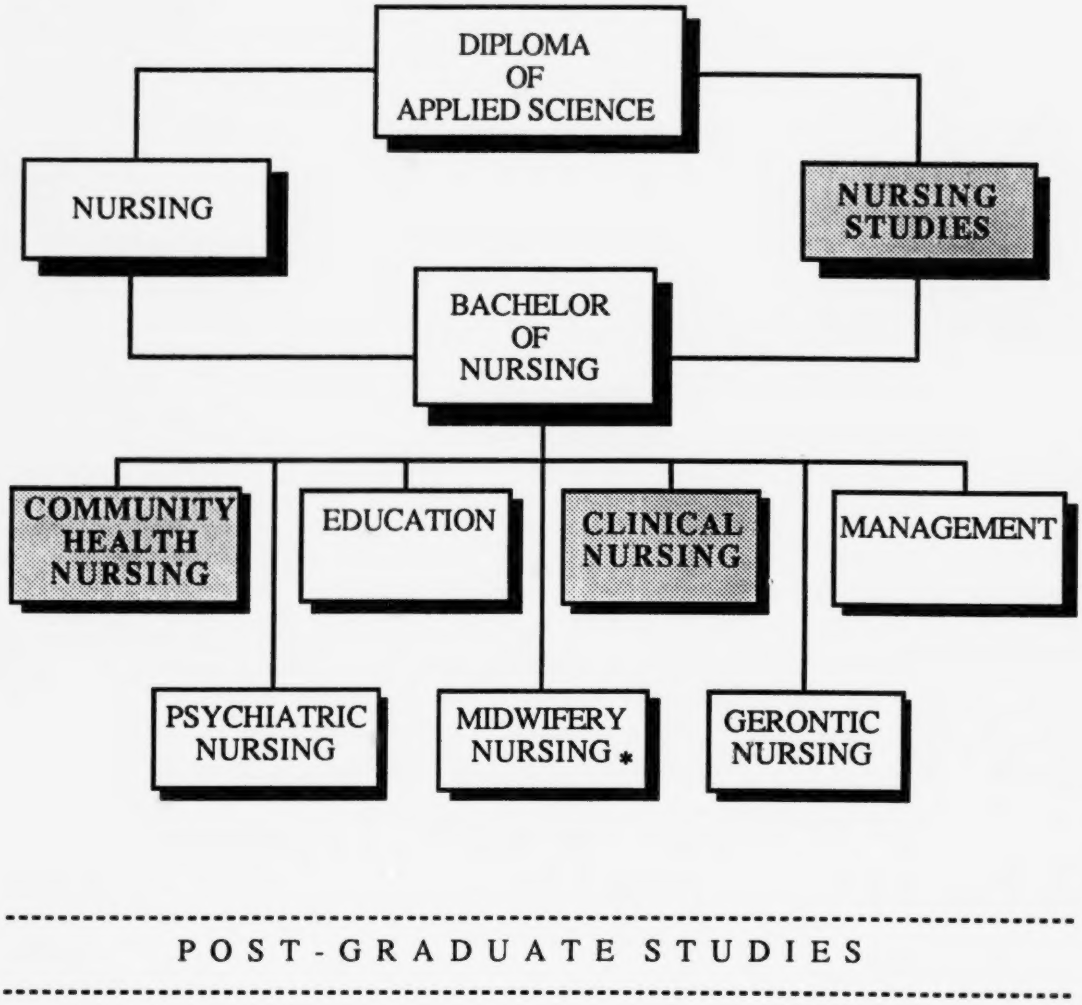
Development of awards

In the last five years the nursing awards at Sturt CAE have been reorganised. Careful planning has enabled us to develop our programs in harmony with the aspirations of the nursing profession in South Australia. Our new awards match the new career structure for South Australian nurses, a structure recently promoted by the Royal Australian Nursing Federation (S.A. Branch) as part of its brilliantly successful campaign for substantial improvements in salaries.

By 1985 the set of awards at Sturt (see Table 3) comprised two diploma awards and a degree award. The pre-registration diploma continues as a three year, full-time program. A new Diploma of Nursing Studies is the post-registration award. It is normally undertaken in two years of part-time study in the internal mode and in three years of part-time study in the external mode. Graduates from both diploma awards are eligible to proceed to degree studies and to choose a major from one of the functional specialisations. In the internal mode these include community health nursing, nurse education, clinical nursing, nursing management, psychiatric andærontic nursing. More recently our model for the articulation of our nursing awards proposes a comprehensive preparation at degree level and specialisations, including midwifery, at post-graduate level.

TABLE 3

S.A. TERTIARY AWARDS IN NURSING
S.A.C.A.E. - STURT
SCHOOL OF NURSING STUDIES
as at 1985


DIPLOMA OF APPLIED SCIENCE
NURSING
NURSING STUDIES
BACHELOR OF NURSING
COMMUNITY HEALTH NURSING
EDUCATION
CLINICAL NURSING
MANAGEMENT
PSYCHIATRIC NURSING
MIDWIFERY NURSING *
GERONTIC NURSING
POST-GRADUATE STUDIES

▨ Courses available by External Studies

* Accreditation in process

We offered the Diploma of Nursing Studies in the external mode in 1986, one year after it began in its internal form. The Bachelor of Nursing award will offer its core studies and the community health and clinical nursing majors in the external mode from 1988.

Changes in the CAE sector

Concurrent with these South Australian initiatives in tertiary nursing education, considerable reorganisation was also occurring in the College of Advanced Education sector. In 1982 all four colleges in Adelaide were amalgamated to form the South Australian College of Advanced Education, which currently has approximately 11,000 students and 1,100 staff, making it the third largest institution of its kind in Australia.

The College has been designated a principal provider of external studies and has developed an External Studies Unit to service its 3,000 external students. Staff of the unit also offer a Graduate Diploma in Distance Education to individuals teaching externally at all levels of education throughout Australia. The Unit provides expertise in theoretical aspects of distance education, and gives assistance with resources design and evaluation. It has produced guidelines for developing external materials, runs staff development programs and provides assistance to individual members of staff and to writing teams. The size and format of print materials and the process of their production have been standardised . The rate of return of assignments to students has been accelerated.

Our own external studies operation at Sturt was absorbed within the framework of the External Studies Unit in a relationship which can be described as mutually respectful. Staff of the Unit are appreciative of our strengths, particularly of our personalised approach to students, the relevance of our course materials to learners' needs and our efforts to maximise interaction between lecturers and students. Statistics gathered by the Unit show that our retention rates in external units are higher than those for the College as a whole.

For our part we have utilised the resources of the Unit, attended their staff development workshops and continued to run our own workshops in liaison with them. We have had some regrets over the loss of our 'small is beautiful' approach, particularly in the area of materials preparation where timelines have lengthened considerably. We have continued with our team approach to the design and preparation of course materials. In practice this generally means team development of the curriculum both in terms of content and process, followed by individual or small group preparation of sections of materials. One team member may serve an overall editorial function.

Library services are a vital part of our external teaching and an external studies librarian remains a member of the team. A toll-free 24-hour 008 telephone service is available to students for requesting library resources. A survey of external students in 1986 by the College library to ascertain library usage revealed that most were satisfied with our service. They had drawn on other libraries with just over a quarter seeking borrowing rights but not always successfully. It is a matter of regret that some of our fellow CAEs were not prepared to extend borrowing rights to our students.

THE DIPLOMA OF NURSING STUDIES: AN ILLUSTRATION

Course development

Our approach to the development and teaching of external nursing education can best be illustrated by examining one of our current courses, the Diploma of Nursing Studies, in some detail. The current admission quota for this course is approximately 200 students per year, of whom approximately 40 are external. In 1987 there were 1,200 applications for those 200 places so it is a course in high demand.

The rationale for the course and its curriculum derives from the nature of the students for whom it is designed. These students in many ways match the profile outlined in the 1986 CTEC Report of the Review of Efficiency and Effectiveness in Higher Education in its chapter on external studies.[4] They are mature-age, in professional employment, seeking further qualifications partly from a motivation to learn more and partly from 'push' factors in their own profession, and choosing to study externally because of distance or the nature of their work. Our students expand this profile in three additional ways. The most obvious is gender. This term is used to encompass not only the fact that our students are 90 per cent female but the implications of this difference for their lives. Many are mothers, running households and taking responsibility for a network of family relationships, combining this role with full-time employment. A second distinctive feature of our students is the nature of their work; most undertake shift work including regular periods of night duty. A third distinction lies in the nature of their post-secondary education which has been narrowly vocational and unlikely to have generated confidence in their capacity for self-directed learning.

These observations apply generally to post-registration nursing students. Our external students have one further identifying feature; they are almost all from rural areas, ranging from large regional centres through small country towns to Aboriginal communities and remote areas. They are often important members of their community. On returning to study they encounter less understanding and more resistance than their metropolitan counterparts, especially if it means compromising family and community responsibilities.

Our external students are experienced and highly skilled nurses, often in responsible positions. In smaller centres they may be carrying out a range of functions which in the metropolitan area would be the province of the medical profession. Many have access to and have utilised nursing journals and inservice continuing education to update their nursing knowledge. Often they know more than they realise but have had little opportunity to have their resources acknowledged or to examine systematically and order their own knowledge base.

Nurses in Australia today find their practice is becoming more technical and specialised. They work in a society which has structured health care bureaucratically and hierarchically. Nurses have views and opinions on the health care system, struggle to understand it and to influence it in their own and patients' interests. The patients with whom they interact are vulnerable individuals facing life upheavals, uncertainty, helplessness, pain and death.

In the light of this profile of the learners for whom the course is designed, the task for the teaching team is to acknowledge that our students are rich in resources and to :

- extend their knowledge base and fill in gaps
- help them generate more sophisticated understandings of their work and its socio-political context
- offer theories against which to fit their own observations and experience and encourage them to develop their own models and critiques
- help them review, confront and extend their interaction skills and the quality of their professional relationships.

To meet these objectives it is necessary to balance a number of competing demands in terms of curriculum content. The acknowledgment of students' existing knowledge and the need for practical application of the course must be balanced against the need for theoretical depth as a firm foundation for nursing practice. This was one of the major hopes of the move to tertiary nursing education in Australia. A balance must also be struck between the study of professional nursing itself and that of the cognate disciplines which support it, both in the social and biophysical sciences.

The course reflects our current assessment of how these criteria are best met. The curriculum was developed jointly by the whole teaching team and fine-tuned by regular 'mulls' which review the content of each component unit and address issues of sequencing and integration. At present, professional nursing studies constitute one-quarter of the course content , liberal studies including electives another quarter, psychosocial sciences one third and applied science in nursing practice the remaining one sixth.(See Table 4 following)

TABLE 4

S.A.C.A.E. - STURT
DIPLOMA OF APPLIED SCIENCE
(NURSING STUDIES)*
EXTERNAL MODE

Semester I	Semester II
Year I Interpersonal Skills Contextual Studies	Society, the Individual and Health
Year II Professional Nursing Studies I Human Development	Applied Science in Nursing Practice
Year III Electives	Professional Nursing Studies II

*The Diploma of Nursing Studies is a 36 credit point course, with 6 points each semester. It is studied externally over 3 years part-time. Students are granted status of 72 credit points, which is the equivalent of 2 years of full-time study, for their hospital-based registered nurse qualification and experience.

In the internal program the 36 credit points are studied over one year full-time or two years part-time. For external students however it has been our experience that this pace is too fast for most. Given the complexity of their other commitments we offer it over 3 years. We are looking to move to a more flexible system where students who are able to do so have the option to proceed at a faster pace.

The sequencing of units is designed to assist students with the most difficult aspects of tertiary study. The course begins with two units which encourage students to value and explore their own ideas and aim to raise their self-confidence. These units also develop writing skills in a relatively informal and unstructured way and provide a contrast to the terse and technical writing style to which nurses are accustomed in their workplace. This provides the foundation for more formal and conceptually oriented thinking in subsequent units.

Because of our students' high initial anxiety about entering tertiary study and our emphasis on student-student and student-staff interaction, we have retained a week of compulsory on-campus study at the beginning of the first two years of the course. Whether this can be continued has been the focus of recent debate. Its disadvantages are the cost to students (particularly as the course becomes accessible to a national clientele), the loss of flexibility it entails and the difficulties which students experience in leaving their workplace for a week, especially those from small country towns and remote areas. Student feedback indicates that the on-campus week is highly successful in dispelling anxiety and building self-confidence. It may also, we suspect, contribute to our retention rates. The challenge for us is to evaluate its costs and benefits more closely and ask ourselves whether the latter could be achieved in other ways or if retention is justified by advantages which only on-campus study can provide. As yet there is no clear answer to these questions.

Examples from individual units

To illustrate some of the principles of external teaching which we have derived from our experiences, some specific units in the course will now be briefly examined.

Interpersonal skills

This 3 point unit is one of the two which begin the course and which run in parallel throughout the first semester. It is both paradoxical and challenging to teach interpersonal skills at a distance. The unit begins with three days of on-campus work but the majority of its content is still in distance mode.

The range of topics covered by the unit includes material on non-verbal communication, self-concept, interpersonal style and self-expression, responding to others and assertiveness. These move from a focus on the intra-personal and the self to a focus on interpersonal relationships. The challenge has been to use a variety of materials, questions and activities which will reflect upon their own skills. This is necessarily a painful process and we take particular care with student support in this unit. In the on-campus week students organise themselves into small groups with the lecturer who will take them through the entire unit. These groups begin the process of getting to know each other as individuals and developing some mutual trust and support, as well as an understanding of what the unit will entail for them. Student-staff contact on a fortnightly basis continues through the unit.

To illustrate the way in which students are challenged to re-examine aspects of communication, a section of the study guide for the first topic, non-verbal communication, is reproduced below. This topic is approached from a feminist viewpoint.

ILLUSTRATION I

Read the article by Henley and Freeman. (Reading 3 in your Book of Readings.)

Activity 6

Examine the ways in which females and males use and claim space in your home (or at your place of work).

Record your observations and/or make diagrams.

Summarise your findings.

Response to your Tutor at Sturt

Henley and Freeman emphasise that many interpersonal behaviour patterns are prescribed for both women and men. Do you consider these feminists are making a "mountain out of ... a trivial molehill"? (Henley and Freeman, 1982:90).

In your response give your reasons for agreeing or disagreeing to the tune of about 500 words or equivalent. In this communication use your own words/pictures/methods of expressing your meaning.

The boxed activity confronts a taken-for-granted aspect of our social world. The response to the tutor acknowledges the discomfort which this may cause and gives students permission to explore it. The question generates a wide range of responses from the student group, but ensures that all students engage with the study material. Lecturers provide individual feedback to students' responses, but often also provide a group letter with summarises and comments upon general features of the responses. Individual students may respond further to the letter when they send in their next piece of work. In this way it becomes possible to set up some dialogue between lecturers and students.

Much of the work in the unit is of a reflective nature and students are asked to keep a private personal journal as part of this. Journal exercises are offered throughout the study guide and journal work forms the basis for a reflective paper which is part of the unit assessment. A journal exercise with its preamble from the section on interpersonal style is reproduced below (see Illustration II). Again, acknowledgement of the difficulties of honest self-appraisal and support for this process is built in to the exercise and accompanying readings.

ILLUSTRATION II

Diary Exercise

The activities and exercises in this segment have been designed to help you analyse your own interpersonal style. You have probably found a number of things about you that you wish you hadn't. But you will have recalled some things that you feel good about. Record these now under two columns:

- Behaviours I feel good about (Read Herman's 'Boast' - Reading 10 for encouragement here)
- Behaviours I'd like to give up.

Contextual studies

This three-point unit is the companion to the Interpersonal Skills unit described above and is offered in the first semester of the course. It is an attempt to move away from the exclusively science/social science based focus of nursing education and to ask questions about the assumptions within which scientific knowledge is embedded. In the external unit this is done through the study of literature. One of the staff who developed the unit, Dr. Cushla Beckingham, has recently published an account of it in the *Australian Journal of Advanced Nursing*.[5] For her, the rationale of the unit is as follows:

> One might ask: "Of what use are the very personal writings of novelists and poets to responsive patient care?" The answer lies in what a study of literature can do to develop the intuitive, perceptive and sensitive skills of nurses. Every student of literature knows that the most important challenge when reading and writing literature is to comprehend the exact message the novelist or poet is trying to share with his/her audience. Each work has a special meaning which often takes time to tease out. Similarly, the nurse must understand the essence of the message which his/her patient is trying to convey.

Students' reactions to the unit noted by Dr. Beckingham in her paper included initial fear, followed by genuine involvement and enjoyment. Students have commented on how well the two units complement each other, developing sensitivity to others through a social science and a humanities perspective respectively.

The unit also has the important function of 'freeing up' students' capacity to write in an imaginative way, drawing upon their own views and ideas and developing the confidence to begin to appraise others' ideas. The content comprises a variety of excerpts from works of fiction which have relevance to nurses' experience. Topics include the questions of suffering, childbirth, mental illness, ageing and death. A sample from the study guide reproduced below illustrates some work on the topic of children and death (see Illustration III)

The focus here is on accurately understanding what the writer is saying and then imaginatively reconstructing the viewpoint of one character and relating it to one's own experience.

ILLUSTRATION III

READ: Chapter 10 in Part One of Ultima Thule (The Fortunes of Richard Mahony).

QUESTIONS to consider when you finish reading:

What details does Richardson use to show us the depth of fear and grief in Richard? in Mary?

What details does she use to show us their different reactions to the fact of the child's death?

ACTIVITY 1

Mary, Richard and Cuffy (aged 7) experience the death of Lallie differently.

Imagine that you are Cuffy. In your Journal, write from Cuffy's point of view what he thinks or feels about death, after Lallie's funeral (one page).

ACTIVITY 2

As a professional nurse, what do you consider makes the death of a child different for you, from the death of an adult? Can you give an example to illustrate this? (one page, in your journal?)

Society, The Individual and Health

This is a six credit point unit taught for the first time in the second semester of 1986. The unit introduces students to the:

- major theories and methods of sociological inquiry and to analyses of contemporary Australian society
- psychology and sociology of health and illness.

A team of six writes, prepares and teaches the unit. In 1986 the materials were organised into four packages, each comprising a study guide and a book of readings, together with audiotapes.

We have selected examples from the unit which illustrate two key teaching principles and the way we apply these in the external mode. First, we integrate theoretical depth with the real world of the nurse and with nursing practice. Second, we offer educational material of high and immediate relevance to the interests of nurses and the people of the region which we and they serve.

EXAMPLE FROM THE TOPIC: THE CHANGING STRUCTURE OF AUSTRALIAN SOCIETY.

The unit begins with this topic. We look first at classical and contemporary social theory; then students are asked to analyse their own communities in terms of one or other, or some amalgam, of the main theories and their concepts of class, status and power. We proceed to the topic of work and the division of labour in industrial capitalist society, and then to the division of labour in health care, both by class and gender. In 1986 we examined the new career structure in nursing which was being introduced in South Australia as a pilot program, and asked students to consider whether this might produce structural change within the health workforce and, if so, how significant this change would be. Materials used for this section include the following:

* **a study guide** which serves as an introductory framework. It includes requests for the students to read pertinent chapters from their texts and provide links between their readings and sets of questions

* **a book of readings** which includes an original essay by Dr. Winston Small, a member of the writing team; two contrasting community case studies which are descriptive and critical analyses of the South Australian industrial town of Whyalla and a small resort town in New South Wales; and nine other readings

* **audiotapes** of a talkback radio program on nurses' salaries and a tape on the career structure, originally broadcast over Radio 5UV, the University of Adelaide Community Radio. This was prepared by our colleague, Margaret Silver, who was seconded from the School of Nursing Studies of the College to the South Australian Health Commission to implement and help evaluate the pilot study on the career structure.

This is an example of how we teach theory in a way we believe is highly relevant to the interests of nurses

EXAMPLE FROM THE TOPIC: CULTURE AND SOCIETY

This second example relates to the community we serve and comes from a part of the second package on Culture and Society. South Australia, we recall, led Australian States in its recognition of the Pitjantjatjara claims to land. Aboriginal claims to better health and health services still have a long way to go. But these issues are related and they have high exposure in South Australia where it is still fairly widely recognised that they are legitimate claims about which everyone, especially nurses, should be well informed. Our writing team was fortunate to have among us Helen Bristow, a Registered Nurse, whose honours degree in sociology concerns Aboriginal mental health. Materials used for this section include:

* **a study guide** with reference to the textbook and a frame of reference for reading and listening

* **a book of readings** with nine excerpts on culture in general and on Aboriginal culture, health and health care in particular

* **an audiotape** of a brilliant program from the ABC's Julie Macrossan. Her 'Background Briefing' on 'Birth Rites' told of the establishment of an Aloukera, an Aboriginal birthing house, in Alice Springs, and of the opposition it has created among obstetricians there. Midwives interviewed on tape were 'for' and 'against', some supporting the women, others supporting the doctors; and so it was with our students, who found the objective analysis they were asked to make, very interesting and challenging.

These are two examples of how we apply theoretical concepts in social science in ways directly related to the needs and interests of our particular student group and the community they serve.

40

Applied Science in Nursing Practice

Applied Science in Nursing Practice is a six point unit which students take in the second year of the course. The unit focuses on scientific concepts underlying body function and nursing practice. The concepts are drawn from the physical and biological sciences and are used to give depth and understanding to topics relevant to nurses, such as lifting, infection control and drug administration.

Having taught science to registered nurses for some years we recognise that areas of deficiency are primarily in knowledge and understanding of basic scientific principles. Our challenge is to prepare materials for external students that they can comprehend, bearing in mind that many have little or no scientific background. The materials are prepared by three people and taught by two of them. Students are provided with six study guides and three supplementary books of readings.

The first two study guides concentrate on straightforward material drawn from chemistry, physics and cellular biology, which is then applied in study guide three to the topics of pharmacology and nutrition. Further study guides consider microbiology and implications for infection control, physiological concepts using homeostasis as the integrating theme, and an introduction to pathophysiology. All of the study guides include study questions for self testing and exercises, not for credit, but to guide the student through the content. Most study guides contain a tutorial paper with questions designed for group discussion. These introduce topics in nursing to which study material can be applied. Illustration IV provides examples of some of the tutorial questions included in study guide three.

ILLUSTRATION IV

TUTORIAL
Here are some questions and topics for you to discuss.

Please send me summaries of your discussions, either written or on tape.

1. Discuss social, psychological, environmental and physiological factors that may have contributed to changes in energy balance in the general population over the last 20 years. Within your own community can you identify groups of individuals who are likely to be suffering effects of:
   a) excess energy intake
   b) insufficient energy intake?

2. "The nutritional care of patients is largely the responsibility of the nurse" Do you agree or disagree? Give reasons.

3. Discuss the method of distribution of meals to patients in your own hospitals. Do you think any improvements could be made to the system?

4. What do you understand by the term "Assessment of nutritional status"? Could the nurse be involved in determining nutritional status of patients? If so, what measurements/observations would be appropriate for the nurse to carry out?

5. Discuss the interrelationships of nutrition and drugs.

   The following headings might be useful:

   a) Effects of Nutrition on drug metabolism

   b) Effects of drugs on the metabolism of nutrients.

The on-campus time allocated to this unit has proved to be invaluable. Material known to cause students most anxiety is presented during this time and laboratory work is introduced. Students carry out a simple practical experiment which incorporates measurement, observation and analysis, and write a report which is marked and discussed before they leave. We call the experiments 'Practicals for the kitchen sink' since with some modification the activities can be carried out at home. Many students however make use of laboratory facilities in local schools or hospitals.

The unit assignments maintain our integrated theme. Case studies and an essay are used to enable students to apply their scientific knowledge to a particular case history or nursing situation.

The unit is challenging and packed but the adaptations we have made enable external students, even those with little scientific background, to increase their understanding of some scientific principles and thus more confidently evaluate their own nursing practice.

Professional Nursing Studies II

In developing this 6 point unit we acknowledged that within the last quarter century nursing has moved decisively towards becoming a scientific discipline. It has begun to generate and test its own theoretical bases, to promote scholarly development of its professional practitioners and to apply its own theory to practice. Using a conceptual framework of the person, the environment, health and nursing this unit considers three major dimensions of contemporary nursing: philosophical, ethical and legal perspectives; model development and research; and professional practice.

PHILOSOPHICAL, ETHICAL AND LEGAL PERSPECTIVES

In this section we analyse the philosophical bases of nursing and discuss the value of a personal philosophy for nursing, how this can be influenced by professional socialisation and the moral codes which make up our plural society. Students are introduced to the study of ethics and to the relationship between ethics and the law in nursing. Assessment is designed to enhance the introspective and thought-provoking nature of the material, and takes the form of a case study concerning an ethical issue. Students are asked to:

- identify the ethical dilemma
- analyse and resolve the problem using two decision-making frameworks provided
- appraise, in summary form, each of the approaches taken and to draw their own conclusions.

MODEL DEVELOPMENT AND RESEARCH

Here we explore the development of knowledge in western society and the contribution of various theoretical models of nursing to the development of contemporary nursing knowledge. We emphasise the importance of nursing research and offer guidelines for reading and understanding the ethics, process and reporting of research including qualitative and quantitative research methods.

PROFESSIONAL DIMENSIONS OF NURSING

In this section we link the major components of professional nursing (ie. the health process, the nursing process, communication and helping relationships) to the role of the professional nurse as practitioner, manager and educator. As registered nurses, students are encouraged as much as possible to direct their own learning and to apply theory to practice in professionally responsible ways.

CONCLUSION

In presenting our experiences in developing and teaching nurse education courses externally, we have described our programs in their historical context and explained and illustrated the key principles which we find valuable for successful external teaching and learning in nursing. We hope these examples are of interest to workshop participants and wish you every success in your own program developments in external studies.

BIOGRAPHIES

Helen Connole

I am a psychologist, originally from New Zealand, with an M.A. in Educational Psychology from Victoria University in Wellington and a Ph.D. from the University of Birmingham in England. I have been at SACAE, Sturt since 1981, teaching psychosocial sciences in both the pre- and post-registration courses. My experience in distance education began at the University of New England where I tutored in psychology for several years and very much enjoyed the challenge of external teaching. I have been able to continue and expand this interest at Sturt and have had some involvement in three units in the Diploma of Nursing Studies.

Patricia Flynn

I am a Registered Nurse and also hold a Dip.T. in Nursing Education, and a B.Ed in Secondary Teaching. I have been a lecturer on the staff at SACAE, Sturt since 1977 and during this time have been mainly involved in teaching within the pre-registration course. I am therefore a newcomer to the external studies arena where, in conjunction with a colleague, I have just completed the writing of my first unit, Professional Nursing Studies II. I find this approach to teaching very challenging. Although a beginner I hope to become much more involved in this mode of teaching in the future.

Anne Lloyd

I graduated in the United Kingdom with an honours degree in Human Biology and as a State Registered Nurse and am therefore a product of a tertiary nursing program.
I came to Sturt in 1975 when the pre-registration course was first established and was involved in the development of the science strand in that course. I returned to the United Kingdom for a couple of years and was involved in the development of the degree in Nursing Studies at the University of Surrey. Since returning to Adelaide I have been working part time at SACAE, Sturt teaching in post-registration courses. I was responsible for the development of the external mode of the Diploma of Applied Science (Conversion). The rest of my time is more than taken up with child rearing and working as a cellar hand, since we live on a vineyard/wine property. Like many of our external students I often wish for more hours in the day.

Jane Shoebridge

I'm a Registered Nurse and Midwife. I did four years of general training at the base hospital in Lismore, Northern Rivers; and that experience helps me appreciate the often marked differences between country and city nursing in Australia. After 'mid', I nursed overseas, including two years in a Lutheran hospital in South West Germany (Freiburg). In 1973 I returned to Australia to go to the Australian National University where I graduated in 1977 with honours in sociology and a major in German language and literature. I've been at Sturt since 1978, and have taught social science in most of our courses. For six years I coordinated the Conversion Course for Registered Nurses, alternating between the internal and external programs.

Elizabeth Sneddon

My background is in nursing, teaching and drama. I went to Adelaide (from Sydney) late in 1976 when I was appointed by the then Sturt CAE to develop and co-ordinate a post-registration course in Community Health Nursing. I'm still involved in teaching and program development and my major commitment remains in the community health field. I also teach in the Interpersonal Skills unit and in Professional Nursing Studies I, a unit that considers the politics of health care.

NOTES:

1. Durdin, Joan. The History of Tertiary Nursing Education in South Australia, Seminar to School of Nursing Studies, SACAE, 1985.
2. Chittick, Rae. Cited in *Nurse Education and Training*, Report of Inquiry into Nurse Education and Training to the Tertiary Education Commission, 1978
3. White, Ruth. Integrating health and care through an educational program, in Margaret Steed Henderson (ed.), *Nursing Education*, N.Y. Churchill Livingstone, 1982, pp. 159-191.
4. Commonwealth Tertiary Education Commission, *Review of Efficiency and Effectiveness in High Education: Report of the Committee of Enquiry*, Canberra, 1986.
5. Beckingham, Cushla. How the study of literature develops perceptive, sensitive morals, *The Australian Journal of Advanced Nursing* 3:3, 1986, pp15-20

NEEDS ASSESSMENT

by Karen Jones, Continuing Education,
Flinders Medical Centre

Continuing Education for country nurses aims at the consolidation of previous knowledge and facilitation of knowledge of relevant developments in clinical, theoretical and professional areas of nursing.

The courses offered are aimed at:

1. Consolidation of knowledge
    - clinical
    - theoretical
    - professional
2. Providing new information
3. Post graduate development
    - self development
    - management
    - research
    - integration of theory with clinical practice and professional issues.

Education is accomplished by:

1. Educators' visits to country hospitals
2. Country nurses coming into city for theory and clinical experience
3. Individualised educational packages
4. Development of preceptors and provision of material resources
5. Video library
6. Hospital inservice lectures/sessions
7. Article library
8. Development of staff in country areas to facilitate continuing commitment by the employing institution.
9. Learning Contracts - Teleconferencing

Needs to be met by a Centre for Continuing Education are those of:

1. Educators
2. Registered Nurses
3. Enrolled Nurses
4. Directors of Nursing
5. Hospitals
6. Profession
7. Governing institution

Learners' needs are identified by:

1. The learner (Nurse wishing/desiring)
2. Director of Nursing (My staff require)
3. Profession (All nurses need)
4. Researchers (I have measured)
5. Institution (You will ....)
6. The client (I want ....)

This could be easily solved by a Nurse Educator - give them all what they want but nothing that they all need. "Fairy Godmother" is a role that many educators have attempted to fulfil in the past.

The role of an educator is more than that of a fairy godmother. What has been identified is basically an informal needs assessment. For an educator to be able to determine the education necessary in nursing he/she has to be able to take into account all the needs identified.

Needs are different from wishes, likings or preferences. Needs are a requirement, while interests are more peripheral to the individual's basic inclinations. Needs and interests are correlated closely and often operate simultaneously in the individual.

The use of a needs assessment may be a guarantee of a commitment by the learner, the institution and the educator if they are involved with this assessment.

Throughout the nursing profession we use the nursing process but do not recognise that it is a needs assessment and that the steps can be utilized in other areas of nursing eg., education and management.

As the Nursing Process is based on identifying unmet needs, it is my view that it can be deemed a "Needs Assessment".

To this end a "Needs Assessment" includes all the steps of the Nursing Process and encompasses the factors of confidentiality, accountability, consultation, individualisation.

Relating the Needs Assessment to the Nursing Process it can be shown that the steps of a Needs Assessment are:

Collection of data
Identification of needs
Clarification of needs identified with learner, institution or profession
Collection of more data is necessary
Planning of education
Implementation
Evaluation

BEGINNING A NEEDS ASSESSMENT

A simple statement, (of a wish or desire), by an individual or a group becomes a trigger for a more formal needs assessment.

With this statement in mind you may find some correlation with research already attended or with reports from government bodies.

Needs Assessment tools can be used singularly or in combination with another.

ASSESSMENT TOOLS UTILISED BY CENTRE FOR CONTINUING EDUCATION FOR CONTINUING NURSES

1. Reports - professional, Government
2. Interviews visits
3. Questionnaire/Survey
4. Observing/Auditing
5. Problem Analysis Method
6. Competency Model
7. Delphi II
8. Pyramid Assessment

INTERVIEWS/VISITS

Correlating Director of Nursing and staff views - emerging common factors.

- can be expensive and time consuming. Staff are not always receptive.
- Provides clarification of points of view.

QUESTIONNAIRE/SURVEY

Clarification of informal needs assessment. Individualized for situation. Questionnaire constructed from informal needs assessment. This can be expensive and there is no guarantee of the return rate or amount completed by individuals.

OBSERVING/AUDITING

Concurrent or retrospective audits
Clinical observation.
This is time consuming and also places stress on staff members.

Observing/auditing can provide a clear indication of the current status of clinical knowledge and skills especially when combined with an informal interview to clarify with learners' needs that have been identified.

NEEDS ASSESSMENT MODELS

1. PROBLEM ANALYSIS METHOD

The continuing educator through this method can assist the "learner" to clarify and refine his/her own needs and to identify a solution.

STEPS

Stating the problem as the learner sees it.
Refining and clarifying the problem.
Gathering information to support the importance of the problem.
Finding the needs .
Separating learning from non-learning needs.
Assigning priorities
Testing commitment.

ADVANTAGES

- Educator does not have to conduct learning activities
- High motivation to learn as learning activities are designed to solve immediate problems.
- Satisfaction of learner as he/she is involved in identification and planning to meet the needs of the staff in the solution of the problem.

DISADVANTAGES

- Crisis orientated - does not necessarily lead to sequenced learning
- May not reveal new opportunities for learning
- Does not provide for individual preferences or self-pacing
- Learners may be reluctant to admit to problems

2. COMPETENCY MODEL METHOD

A competency based assessment tool indicates gaps in knowledge, attitudes and skills for a large group or institution. This enables the learner and/or educators to identify specific needs in a subject area and allows the learner to control his/her information to work towards reducing the gap - a motivator for both learner and teacher.

A tool which can be used for pre/post assessment/re-assessment/ evaluation.

Competencies are described in terms of observable behaviours. Important behaviours are gleaned from one or more of the following sources:

- Asking or observing competent practitioners
- Consulting or conducting relevant research
- Consulting supervisors
- Reviewing job descriptions and performance standards
- Conducting a task analysis
- Assisting a group to develop its own model with the aid of current literature and/or an expert
- making an informed guess

STEPS

Develop a competency model

Assess present levels of performance - learner orientated

Specify needs - of an individual learner or a group of learners

Separate learning from non-learning needs

Assign priorities with the assistance of the learner

Test commitment of the learner, group, institution and educator.

ADVANTAGES

- Provides an agreed-upon standard of behaviour for a particular role or task
- Provides a guide for designing inservice or orientation training
- Adaptable to individual needs, preferences and pacing

DISADVANTAGES

- Requires a continuous educator/learner relationship
- Delays immediate solution of learning needs
- Requires a great deal of information about competent behaviours

Example - Self Diagnostic Rating Scale "Need Assessment"

SELF DIAGNOSTIC RATING SCALE

Name: ______________________________

Indicate on the six point scale by each of the competencies listed below.

R = the required level for excellent performances of the appropriate skill by placing an "R" at the appropriate poin

P = the present level of your knowledge and skills of each competency by placing a "P" at the appropriate point

You will emerge with a profile of the gaps between where you are now and where you need to be in order to perform your role well.

			P			R	
	0	1	2	3	4	5	6
	Absent	Low (aware of it)		Moderate Understanding & Skill			High (expert)
1. Discuss the advantages and disadvantages of the Problem Analysis Method of assessing learning needs with peers.	0	1	2	3	4	5	6
2. Use the Problem Analysis Method to assess the learning needs of a specified population	0	1	2	3	4	5	6
3. Develop a needs assessment philosophy with co-workers	0	1	2	3	4	5	6
4. Use the Delphi Method to assess needs of learners	0	1	2	3	4	5	6
5. State 5 constraints that you might face in completing a needs assessment	0	1	2	3	4	5	6
6. Use the Competency Model Method to assess learning needs of a selected target group	0	1	2	3	4	5	6
7. Given a group of up to 40 students use the Pyramid Assessment to determine common needs	0	1	2	3	4	5	6
8. Discuss with a peer the advantages and disadvantages of using the Pyramid Assessment for assessing learners needs	0	1	2	3	4	5	6
9. Use a concurrent or retrospective audit to determine needs of a clinical unit	0	1	2	3	4	5	6
10. List ten Needs Assessment tools or needs assessment methods	0	1	2	3	4	5	6

NEEDS ASSESSMENT TOOLS AND METHODS

1. **Checklist**
A task process, activity or area of responsibility is broken down into detailed parts or steps and these are arranged in a logical sequence. A column allows the learner to check areas in which knowledge, skill or practice is needed. All items are work-related and do not contain reference to non-learning problems.

2. **Delphi II**

a. Participants are asked to list 10 important skills or knowledge items that are needed to perform their work

b. Results are collated

c. List circulated to participants who are asked to rate the importance of each cluster (1 - ...) using each number only once

d. Results are collated

e. List is circulated to participants who are asked to rate importance of each item in achieving job responsibility and to rank themselves on a scale to show mastery of each item

f. Collation

g. Planning

3. **Pyramid Assessment**

A. Each learner is asked to think about his or her learning expectations for the course etc.

B. Participants pair off and discuss their expectations for 5 mins attempting to find mutually shared ones.

C. Each pair joins another pair and the group explores mutually shared learning expectations.

D. Each four joins another four and discusses shared expectations. A recorder lists common learning expectations.

E. Entire group reconvenes and responses are recorded on a flip chart.

Advantages

Community learning group formed.
Learners take maximum responsibility
Minimal amount of time required.

Disadvantages

Limited to small population - 40 people
Minority expectations are lost
Final expectations tend to be general rather than specific.

CONCLUSION

Without any form of needs assessment educators can maintain nurse education as it is today, teacher orientated and teacher directed. With the appropriate use of a needs assessment the educator becomes a facilitator and the learner more committed to this/her own and others' clinical and professional development.

A NEEDS ASSESSMENT REFERENCE LIST

Anderson, P. The Delphi Technique in Practice. *The Australian Journal of Advanced Nursing* , 3:2, 1986, pp. 22-32.

Bell, D. F. Assessing Educational Needs: Advantages and Disadvantages of Eighteen Techniques, *Nurse Educator* , 3:5, pp. 15-21.

Bell, E. A. 'Needs Assessment in Continuing Education: Designing a System that Works, *Journal of Continuing Education in Nursing* , 17:4, 1986, pp. 112-115.

Bowman, B., Wolkenheim, B. Le Beck, M. O'Donnell, D. 'Needs Assessment: An Information Processing Model', *Journal of Continuing Education in Nursing* , 16:6, pp. 200-204.

Canar, M. J. and Johnson, J. 'An Employee Learning Needs Assessment Concerning Mental Health Needs of Residents in a Long Term Care Setting', *Journal of Continuing Education in Nursing* , 17:1, 1986, pp. 5-11.

Chambers C. Carolyn '*The Nurse as Continuing Educator*',Springer Publishing Co., New York, 1979.

Chesney, A. P. and Beck, S. 'Assessing the Need for Continuing Education for Registered Nurses', *Journal of Continuing Education in Nursing.*, 16:2, 1985, pp. 39-44.

Cooper, S. S. & Hornback, M. S. 'Continuing Nursing Education' New York, McGraw-Hill Book Co., 1973.

Cooper, S. 'Planning for Continuing Education in the North Central States', *Journal of Continuing Education in Nursing* , 4:5, 1975, pp. 6-13.

Cooper, S. 'Continuing Education: Yesterday and Today', *Nurse Educator*, Vol 3:1, 1978, pp. 25-29.

Eltzeroth, P. 'Obstacles to Regional Continuing Education in Nursing', *Journal of Continuing Education in Nursing* , 7:3, 1976, pp. 46-48.

Flewellyn, B. & Gosnell, D. 'Comparison of Two Approaches to Hospital Orientation for Practice Efficiency and Preferred Learning Methods of Registered Nurses', *Journal of Continuing Education in Nursing* , 16:55, 1985, pp. 147-152.

Forte, P. 'Computer Technology for Nursing Staff Learning Ward Assessment', *Journal of Continuing Education in Nursing* , 15:5, 1984, pp. 155 -158.

Huber, C. 'Continuing Education - Voluntary or Mandatory? Three Challenges to the Nursing Profession', Kansas City; 1972 ANA, pp. 27-31.

Karasik, D., Johanson, L. and McArdle, A. 'Course Tailoring for on-the-job impact in Infection Control', *Journal of Continuing Education in Nursing*, 8:4, pp. 12-16.

Kaye, A. and Greville, R. (Eds) *'Distance Teaching for Higher and Adult Education'"*, Open University Press, London, 1981.

Kuramoto, A. 'The Status of non-traditional study', *Journal of Continuing Education in Nursing* , 9:2, 1978, pp. 29-32.

Long, K. 'An overview of needs assessment tools for continuing education', *Nurse Educator*, 2:2, 1977, pp. 12-16.

McCaffrey, C. 'Performance checklist: an effective method of teaching, learning, evaluating", *Nurse Educator.*, 3:1, 1978, pp. 11-13.

Meade, M. E., Burger S., Nicksic, E. 'Contracts for Continuing Nursing Education', *Journal of Continuing Education in Nursing* .

Minnis, J. R. 'Ethnography, case study, grounded theory and distance education research', *Distance Education.*, 6:2 1985, pp. 189-198.

Nay-Brock, R. M. 'A comparison of the questionnaire and interviewing techniques in the collection of sociological data', *The Australian Journal of Advanced Nursing*, 2:1, 1984. 14-23.

Norman, A. and Hoffman, K., 'The Benefit of Direct Performance Tests', *Journal of Continuing Education in Nursing* , 7:3, pp. 1976, 34-37.

Ottoson, J. and Stearns, N., 'Is Retrospective Chart Audit a Viable Base for Continuing Education', *Journal of Continuing Education in Nursing* , 16:14, 1985, pp. 111-113.

Popiel, E. S., (ed.) *'Nursing and the Process of Continuing Education'* 2nd rev. ed. St Louis; Mosby, 1977.

Puetz, B. E. and Peters, F. L. *'Continuing Education for Nurses - A Complete Guide to Effective Programs'* Aspen Systems Corporation Rockville, Maryland. 1981

St Clair, C., Pickard, M. Harlow, K 'Continuing Education for Self-Actualization', *Journal of Continuing Education in Nursing* , 17:1, pp. 27-31.

Stewart, D. Keegan, D. Holmberg (Editors). "Distance Education - International Perspectives" St Martins Press, New York 1983

Styles, Margretta "Continuing Education in Nursing. One topic for professional coherence". *Nurse Educator* , 1:2, 1976

WAKE, Madeline and GOTCH, Pamela "Advancing the Science of Nursing: A Research Based Conference for Staff Nurses". *Journal of Continuing Education in Nursing.*, 16, 3: 1985

DEFINITION, THEORIES AND RESEARCH IN DISTANCE EDUCATION

by Michael S Parer
Gippsland Institute

Distance Education is a relatively new mode within the field of Education as an academic discipline. I believe that, as we come to apply distance education to nursing education it is important that we look for some underlying theoretical basis. Other disciplines such as Psychology or Medicine have been subject to systematic investigation for decades and have built up theoretical structures. DE as an academic discipline is new. Its only in the last ten years that there has been a body of writing and a growth of professional journals where theoretical issues are discussed. Fundamental to any theoretical basis is that research is a basis for action and it is interesting to see the recent growth of research into various aspects of DE.

After a consideration of a definition of DE and two of the DE theories I would like to refer to a few of the research projects that we have initiated here at Gippsland Institute and also to reflect on the aspects of the adult learner that this has forced us to consider .

Following this I will offer a comment about this workshop.

To begin, I offer a definition of DE based on Desmond Keegan who has written extensively on this topic. For him there are five elements:

(1) the physical separation of teacher and learner
(2) the separation between the learner and the learning group
(3) that there is an educational organisation that links the teacher and the learner
(4) that it uses technical media, mainly print though others as well, to carry the content of the course and to link the teacher and the learner, and
(5) there is a fundamental importance of two-way communication between the teacher and the learner by alternate ways to those in on-campus teaching.

There is now general agreement that this is a satisfactory definition.

Rather than go into a dissertation on the theoretical basis of DE, let me share with you views by two world figures in the field of DE. At one extreme we have that of Professor Otto Peters, the founding Vice-Chancellor of the People's University, Fernuniverstat in West Germany. Otto Peters argues that DE is an industrialised approach to teaching and learning: "DE and teaching is a matter of imparting skills and attitudes, rationalised by the application of the division of labour and organisational principles, as well as the extensive use of technical media, especially for the purpose of reproducing high quality materials which makes it possible to instruct."

This definition has had a powerful influence on the whole field and illustrates how theory flows into practice. When we later look at the three major elements in a DE system, there is indeed the one element of the print production and dispatch that is based on an industrialised process, but I find it difficult to accept that the whole process is one of industralisation.

The model of DE as argued by Borje Holmberg is quite different. As opposed to the industrialised model he argues for 'guided didactic conversation' or 'guided teaching': "DE is self study not private reading, for the student is not alone, the student benefits by having a course developed and also from the interaction with tutors and representatives from a supporting organisation. This relationship between the supporting organisation and the student is best described as 'guided didactic conversation'.

If we look at a total system for DE comprising three significant elements of:

(a) the design, development and production of stimulus study materials,
(b) an administrative system, and
(c) the tutoring of the student

you will note that the industrialised model can be applied quite substantially to the first element and the 'guided didactic conversation' model applied very much to the third element and in a second there is a mixture of both.

Over the past twenty years DE has certainly flourished. Many writers about this field have different perceptions as to the cause of this.

For example, Tony Bates from the Open University argues that it is because of the development of new communication technologies. John Daniel, past president of the ICDE believes that it is because of the growing sophistication of the use of print material; Borge Holmberg, because of the improved design of instructional material; David Sewart of the Open University because of the growth in the provision of support services for students; and Professor Walter Perry, the first Vice Chancellor at the Open University 'because the Open University was established'.

At Gippsland Institute's Educational Development and Research Unit we have a number of research projects. Our philosophy is to have them unit-based in which we gather data and ask students to reflect on their teaching and learning experience. The idea is to feed back to lecturers so that they may be informed for their further writing and teaching.

In one project we sent a diary to 100 students and asked them to keep a log and record their actual study over 30 days. These diaries were returned and analysed. Case studies were written about some of these. This was published in the student newspaper and, of course, fed back to the individual staff member. I attach a copy of this report in your workshop briefing. (Appendix A)

Another project used a Study Protocol Recorder and followed students as they simulated their studying over a couple of hours. We gave them two questionnaires, observed their studying and then de-briefed them in an interview. In this we were looking to see how students went about their study and how instructional design factors helped that study.

Another project looked at the resources used to support students and paralleled a Swedish study - how students preferred and used the various resources such as Weekend Schools, memos, telephones and so on, to see which resources were most appreciated by the students.

A further project was in conjunction with several institutions (Massey University, New Zealand; Deakin University and South Australia CAE), in which we sought to find the institutions' policies to External Studies, the rewards that they gave staff for participating in External Studies and how this influenced staff.

These are examples of the type of research that is undertaken to inform ourselves and our staff in our DE practices. It influences our Staff Development programs and the development of our study material.

The one element that emerges strongly from all these projects is that in DE we are dealing with the adult learner. The characteristics of adult learners that emerge are that students are self-directed and take responsibility for their own learning. They seek a clear relevance for their study - if it is just for exams they'll will put it into their short term memory and after the exams drop it; the control resides within themselves rather than within the system or with the teacher. These students like to have things they find enriching and they like clear contracts; they need achievable goals, clear directions, new knowledge connected with existing knowledge. Adults learn and grapple with new concepts when they are placed within the contexts of beliefs and knowledge they already hold. Adults like realistically paced study, quick feedback, general directions as well as specific comments; they have diminished dependence on short term memory and are attracted to deep rather than surface memory. They appreciate when a teacher shows confidence in their learning ability and has an adult relationship with the student.

Much of our research has concerned the large drop-out rate in the early stages of a course. At the Open University Alan Woodley and Malcolm Powlett have proposed what they call the push and pull factors that influence students and help explain this high drop out. The push factors are: they want the course for promotion; they are interested in the subject; they are allowed time off from work; their spouses are encouraging; they are determined to finish something that they have started. The pull factors are: they want more time to themselves and their families; they did not realise the cost involved; the course is difficult and getting back to study and writing assignments is hard work; they do not like the tutor and on-campus course available nearby.

Comments and Highlights by participants about the program of Tuesday, 10 February

The number of issues and ideas regarded as valuable from the Tuesday session reflected the development of awareness about the scenario of distance education, including the role of ASPESA and the implications of becoming involved in distance education.

The SACAE presentation was appreciated as illustrating a practical way nurse education can be handled through distance education, and information on needs assessment was also regarded as useful. The need for a team approach, including 'experts' such as Instructional Designers was mentioned.

Strategies considered useful included needs assessment; cooperation with other teachers; and techniques related to the presentation of study guides and to the establishment of contact with students.

Positive appreciation of the day was expressed although a couple of comments suggested that it was a long intense program.

The question asked of participants was:

Would you please note main issues which were of value to you as a nurse educator interested in distance education

- Establishment costs of DE
- Evaluation areas can be delivered in the distance mode
- Courses need to have a long 'shelf life' to be viable in the mode
- The importance of the ASPESA group
- Reference lists and names of the 'leading lights' in distance education
- Possibility and invitation to ASPESA membership
- DE takes a lot of work
- Forecast of future employment trends which may influence DE Programs
- Adventures of SACAE through the history of their DE development - it can be done
- Sturt - team approach for planning and presentation excellent
- The volume of work being done in SA by nurses and their approach
- Different aspects of conducting a successful needs analysis
- Needs analyses are hard to do, but necessary
- Needs assessment questionnaires useful tools
- Needs assessment bibliography
- Guidelines for study guides
- Use of experts in developing programs, instructional designers
- The use of team approach and of 'experts' such as intructional designers
- Course should be developed to reach widest possible target group
- Materials should be developed and delivered via existing infrastructure
- Stimulating activity by the learner
- Needs analysis prior to commencing program
- Guidelines for program development by Capricornia Institute
- Development of study guide guidelines
- Establishment of co-operative networks
- Work together with other teachers
- Teachers visiting the students eg. once a semester
- Using an introductory week on campus for 'laboratory' sessions eg. Interpersonal Skills; Bioscience Laboratory session to demonstrate procedure for subsequent labs
- An introductory Booklet for each unit explaining Content, Format and Assessment
- A Unit letter for assignments to all students
- A great enthusiasm among nurse educators for DE
- Long day

Day Three

Wednesday, 11 February 1987

Chair:

Tony Barnett, Head of Nursing, Warrnambool Institute of Advanced Education

9.00 am Gail Perry, Department of Health - Aboriginal Health Program, Queensland Pilot Project for AUSSAT, Q-NET, using satellite to provide Distance Education for Aboriginal Health Programs throughout Queensland, and for developing curricula for ongoing in-service training for registered nurses and health workers.

Robert Thornton, Principal Nurse Educator, Outreach Nursing Education Service, where he has developed the Nursing School of the Air.

ORGANISATION FOR WORKSHOP SESSIONS
WEDNESDAY & THURSDAY

Workshop Leaders

Group A: John Evans and Anne McMurray
Group B: Daryl Nation and Jo Osborne
Group C: Stuart Hosking and Jane Shoebridge
Group D: John Fenwick and Pam Ryan

	Group A	Group B	Group C	Group D
Workshop 1	Z + Y	X + W	V + U	T + S
Workshop 2	Z + X	Y + V	W + T	U + S
Workshop 3	W + S	Y + T	U + X	Z + V
Workshop 4	W + U	T + S	Z + Y	X + V
Workshop 5	T + V	Z + U	X + S	W + Y

Groups A and B will meet in the SOUTH small Staff Lounge, and Groups C and D in the NORTH partitioned Staff Lounge.

11.00 -12.30 pm **Workshop One**

How to Write an Effective Study Guide

12.30 pm Lunch - in knuckle

1.30 - 2.00 pm Tour of External Studies Division at Gippsland Institute.
Dick Cohen and Liz Veno

2.00 - 3.15 pm **Workshop Two**

The use of non-print components - audio and video - in external study materials.

3.45 - 5.30 pm **Workshop Three**

Laboratory and clinical components for external students; the training of clinical teachers and preceptors.

Workshop Three - Additional Workshop Leaders:

Group A: Lorraine Kelly
Group B: Tony Barnett
Group C: Robert Thornton
Group D: Margaret Dawson

6.30 pm Evening meal - in Student Cafeteria

7.30 pm Free

- Video: "Educating Rita" - experiences of an Open University student
- Computer Software: Bob Denholm will have for display and use a VAX computer with software from Gerri Nakonechny, Program Head, Post Graduate Nursing Programs, Health Sciences Division, Grant McEwan Community College, Edmonton, Alberta, Canada
- Audio visual presentation from Mayfield Centre on "The Human Body, An Introduction to its Structures and Functions, Unit 5, Skeletal System"
- From The Open University in U.K. -
  A Systematic Approach to Nursing Care, An Introductory Group work pack with audio and video tape
- Caring for Health - Dilemma and Prospect, part of the Health and Disease, second level course number U205
- Caring for Older People - with workbook, case files, four audio cassettes, list of videos to be borrowed, media booklet, etc.
- Gynaecology for Distance Students, Northern District School of Nursing, Bendigo
- other materials displayed by participants.

Participants have been invited to display their external study materials that evening.

ABORIGINAL HEALTH PROGRAM AND PILOT Q-NET PROJECT

by Gail Perry , Nurse Educator, Aboriginal
Health Program

As the Nurse Educator, Aboriginal Health Program, one of my responsibilities is to develop material for on-going in-service training for Public Health Nurses and Health Workers who are employed in the Aboriginal Health Program. For the 18 months that I have been in the position that is precisely what I have been attempting to do. Nine years in the Aboriginal Health Program as a Public Health Nurse has certainly been an advantage to me in that I am very familiar with the roles of Public Health Nurse and Health Worker.

On the other hand I have had to recognise that in having 'been there, done that' I tend to think I am already 'au fait' with the needs and wants of the field staff I am directing this material to. An erroneous conjecture on my part but one I wish to share with you, because developers of curricula can fall into this fatal trap so easily: following the correct procedure or process for developing curricula but still giving the participants exactly what you knew they needed, or thought they wanted in the first place.

I intend to describe briefly to you how the Training Unit of the Aboriginal Health Program planned, prepared and presented four sessions for the Queensland Government's pilot study of the use of satellite communication.

Before I talk about the Aboriginal Health Program's involvement I want to address quickly the second string to my bow - the development of a curriculum for Health Workers in the Aboriginal Health Program. We use a handout which has a cartoon character leaping ecstatically in the top left hand corner. (Appendix B) He is supposed to reflect the enthusiasm that participants will feel when embarking on this very difficult journey of contributing to curriculum development. In other words he's supposed to motivate field staff to 'have a go' and to mask the enormous complexity of the task ahead of them. As do other characters who appear in this curriculum development package he reflects a talent I have developed as the result of being a less than adequate artist - an ability to cut and paste. The greatest problem I had in developing this material to gain the cardinal input from field staff was to convert professional jargon into terminology that could be easily understood.

Moving on then to the pilot study, I have a number of experiences to share with you. Firstly, in order to elicit your sympathy I confess that my experience with cameras before this venture amounted to unfortunate encounters with a box Brownie. Secondly, may I draw your attention to the fact that in Queensland there are 29 Health Teams and four sub-units of the Aboriginal Health Programme. These teams function as Primary Health Care providers in a variety of geographic locations where there are significant populations of Aborigines and Torres Strait Islanders.

Health Teams consist of a Public Health Nurse, two or more Health Assistants/Health Workers and a clerk/typist. The majority of Primary Health Care providers employed in the Aboriginal Health Program are indigenous peoples, recognised by their community and employed in their community. They invariably do not have health care qualifications prior to joining the Aboriginal Health Program and are expected to acquire numerous skills and a great deal of knowledge 'on the job'. I hope this scenario has given you at least a foggy picture of the target group that could potentially receive the Aboriginal Health Program's sessions.

PLANNING

The planning stage of the Aboriginal Health Program's involvement in the Nursing Services project for trialling the AUSSAT, Q-NET satellite network began several months before I became involved.

The Director of Nursing (Aboriginal Health) organised a needs analysis survey of all field staff, and when I took up my present position an analysis of the data led us to believe that teaching skills were what most staff wanted. The only other activity that involved field staff in this planning phase was a learner mode questionnaire. Although it was very simplistic it was very effective. Other learning style inventories I have seen use such vague concepts that are open to such diverse interpretation that I knew what field staff would do with them.

Meanwhile I was extremely busy doing a literature search on distance education and the use of satellite communication. I read scores of journal articles that were written in English and looked at the pictures in those written in other languages. I attended the only seminar

INFORMATION ABOUT YOUR HEALTH TEAM

The Aboriginal Health Programme

QUEENSLAND

aims to help you and your children gain the same chance of good health as other Queenslanders

Produced by
Aboriginal Health Programme
Queensland Health Department

World Expo 88

PROUDLY PRINTED IN QUEENSLAND

00 04 80

held in Brisbane during that period on satellite communication and gained valuable information about the Canadian experience. In reality we had to reinvent the wheel because material already developed that would be suitable had copyright that prohibited its use. Our budget was virtually non-existent. Problems with the interpretation of what constitutes a broadcast meant that we couldn't show any films or videos that we had not made ourselves. At this stage I learnt all I could about the making of videos. I was able to have a story board made that took the script cards I planned to use.

PREPARATION

So it came to be that four sessions on Developing Teaching Skills each of two hours duration, were developed (Appendix C). Those original sessions contain some of the best work I have ever done, the result of the hardest work I have probably ever done. In fact they were too good for the satellite trial and I have plans to use them in the module on developing teaching skills in the curriculum for in-service training. Actually I developed four better sessions - better because they were more appropriate for the stage of technological development within the pilot study program and for our abilities to understand and use that technology.

A simulation of the transmission of one of the sessions highlighted the problems we could anticipate and aided us greatly in developing suitable graphics and eliminating teaching aids that proved unsuitable, such as slides.

The preparation of field staff was considered very important. The few Public Health Nurses who did not participate enthusiastically were not involved, for various reasons, in the preparatory stage, confirming for me the importance of this stage.

Preparation of field staff included:-

. distribution of Q-Net Update Publications;

. identification of a facilitator for each centre receiving a transmission, and gaining that person's cooperation and commitment;

. a teleconference involving facilitators to establish understanding of role and responsibilities. This strategy was well worth the time and effort and was surprisingly inexpensive.

PRESENTATION

As many field staff as possible were involved in the actual presentation. That meant the cooperation of several Health Teams within a few hundred kilometre radius of Brisbane. They collectively responded selflessly and plunged into the unknown with great enthusiasm and immense talent. I will never regret that involvement. It proved what we already know about adult learning - learning experiences must be tied to everyday experiences that the learner can identify with and relate to.

Fortunately our enthusiasm for trialling the technology to the desired extent resulted in the pre-recording of some of the sessions. Actually the last two sessions were almost entirely pre-recorded except for the introductions, conclusions and question times. We could never have achieved what we wanted 'live'. The most difficult part of the presentation stage was distributing the pre-session literature to Health Teams in sufficient time for the facilitator at least to be conversant with the content. This content included the session format and keywords list; information on the teaching methods to be demonstrated so they could use the methods later themselves; and activity sheets and evaluation questionnaires for that session. There was always a covering letter to the facilitator with clear guidelines to be followed.

I'd like to draw your attention to some examples of strategies used to trial the interactional qualities of satellite technology. We had the basic interactional qualities of one-way visual and two-way audio. That means that those who had access to a phone at their receiving centre could phone in questions or observations. Studio phones were mainly answered off the set, but we did trial a phone on the set. Phone numbers were well advertised during the session. As well, field staff were involved in activities in their own locality such as the Aboriginal Learner Style activity in session two where they phoned in results which were listed and compared with other teams' results on camera. Other activities included a worksheet for the field trip in session four and as assessment tool for the Demonstration also in session four.

An adjudication sheet was prepared for the Informal Debate from session three. Completed activity sheets were posted in as were the lecturettes developed by field staff as a result of their being included as part of the class in the session on Lecturettes. A class in the session on Lecturettes. A programmed instruction package was the finale and these were returned a few weeks after the sessions were concluded.

You are now going to see examples of the teaching methods demonstrated in sessions three and four. The titles you will see are computerised graphics. Firstly you will view a short extract from an informal lecture on Lecturettes given by a Public Health Nurse to her team. Those viewing know they are included in the class and are expected to perform in the same way as the 'real' class. Their lecturettes had to be posted before the session the following week (the actual session took 15 minutes but you will see 4 minutes).

The second clip (Informal Debating Sequence) is a short extract from the session on Informal Debating. This was a brilliant session of 20 minutes duration developed almost completely by those who appear in it (the clip lasts for 12 minutes).

The third clip I simply couldn't leave out. It demonstrates role play as a learner-centred teaching strategy. It was completely ad-libbed by the performers, all of whom are Aboriginal Public Health Nurses or Health Workers (the clip will run for 4 minutes).

The last clip I included so you could see the difference between what you have just seen, studio pre-recorded video tape, and edited film taken with a mobile video camera team on location. This clip concludes with a short live segment worth seeing merely to demonstrate the difference, from a viewer's point of view, between well edited pre-recorded video film and a talking head live broadcast (the clip will run for 6 minutes)

(These video extracts were excellent and readers who wish to view them should write direct to Gail Perry at the Queensland Health Department - Editors Note.)

EVALUATION

In conclusion, evaluation was effected by:

A. measuring participant involvement in interactional exercises;

B. evaluation questionnaires for each session for participants and for facilitators;

C. measurement of number of potential participants against number of actual participants;

D. eliciting reasons for non-attendance;

E. identifying limitations of the technology;

F. identifying the benefits of using satellite technology for distance education in the Aboriginal Health Program.

MY PERSONAL OBSERVATIONS

1. Everyone's an expert until you see his/her work or see him/her at work. Don't be discouraged or overwhelmed.
2. Satellite technology has the potential for being enormously beneficial for distance education in nursing - not just for remote areas but for nurses just down the road who cannot access face to face on-going education.
3. The effectiveness of satellite technology in on-going in-service education for the motivated learner is second only to face to face learning.
4. Don't copyright your work. Make it easily accessible to other nurse educators who may use it as is or adapt it to their local situation.
5. There are many registered nurses in remote and regional areas engaged in primary health care who want and need clinical assessment skills development that are appropriate to nursing. Satellite technology can facilitate this by transmitting to multiple centres at the same time.
6. If you have the opportunity to trial this form of communication I urge you to do so. It is well worth the experience.

NURSING SCHOOL OF THE AIR

By R. N. Thornton
Principal Nurse Educator
Outreach Nursing Education Service
South Australian Health Commission

PROGRAM DEVELOPMENT AND IMPLEMENTATION

Nursing in Australia has undergone dramatic changes in the last 10 years following the initial development of college facilities for some nurses. The pattern of improving the educational standard of nurses culminated in 1984 with the Federal Government's commitment to fund the transfer of nursing training into Colleges of Advanced Education by the 1990s, and in S.A. this year with the implementation of a new career structure.

Nursing in Australia's remote areas has also been subjected to change over the last 10 years. Whilst not as dramatic in the educational sense, the changes are nevertheless important as nursing staff develop their role in keeping with the ever increasing changes in the spheres of medicine and pharmacy, and in fact, every facet of health care.

Over the last five years, the role of a nurse practitioner or 'barefoot doctor' has emerged as one person which must, by necessity, work in isolation and be an 'extension of the senses' for the medical officer who is often hundreds of kilometres away. This has led to the development of the Council of Remote Area Nurses of Australia, which conducted its first National Meeting in 1983 in Alice Springs, and subsequent gatherings have been held in Adelaide, Townsville and Melbourne, to formulate the association's constitution and to identify the educational needs of remote area nurses. With a combination of educational pressure and the emergence of a new professional role, remote area nurses are actively seeking access to on-going education.

The majority of staff practising in remote areas relate directly to the Royal Flying Doctor Service through the radio network in Central Section bases at Alice Springs, Broken Hill and Port Augusta, and have the opportunity to gain access to a medical officer when the need arises. Although the medical officers working within the Central Section network contribute significantly to on-going education for nursing staff it tends to be informal and somewhat sporadic, depending on the demands placed on the medical practitioner and how that person views himself/herself as an educator. Thus it is strongly believed that a radio network that is basically concerned with the receiving and transmission of medical matters could be expanded to provide a two-way educational process by which remote area nurses could receive on-going education.

The following objectives were utilised in the research and development of Nursing School of the Air during 1984:-

1. to determine the educational needs of remote area nurses;
2. to identify which of these needs can be met by means of a two-way radio broadcast;
3. to produce suitable programs that would facilitate two-way exchange of ideas on the various educational topics, over a 45 minute time allocation;
4. to develop a format that could be utilised in the Royal Flying Doctor Service Base at Port Augusta (V.N.Z.) to deliver educational material.

To meet the above objectives, a 'marriage' was performed between two organisations sharing a common philosophical view towards the provision of health care and education in the remote areas of South Australia. The two organisations are the Royal Flying Doctor Service (Central Section) established in May 1939, and the Outreach Nursing Education Service, South Australian Health Commission, Western Sector, established in November 1982.

In meeting the first objective, i.e. determining the educational needs of remote area nurses, the excellent survey of outback nurses' training needs conducted by Munoz and Mann in 1982 was utilised, and many nursing staff employed in outback South Australian locations contributed suggestions. In fact from both sources 14 A4 sized pages of ideas and topics were obtained. When this formidable list was reviewed to identify the needs which could be met by two-way radio broadcast, it was reduced to some 6 A4 sized pages.

The production of programs that would facilitate the two-way exchange of ideas on various educational topics took much more time and thought. Eventually the format was arrived at by our participants being forwarded an outline of the forthcoming lecture material. Often these notes have spaces to allow students to interact by way of writing as they listen to the information being broadcasted to them. This interactive package was designed to help students to build up a compendium of lecture notes which would be an educational resource that they had participated in making. Since the Royal Flying Doctor Service has had many years of experience in broadcasting it was not difficult to produce a format that could allow the produced material to be broadcasted to nursing staff. This in general is as follows:

1. Welcome to all nursing participants;
2. Announcement of topic(s) to be covered during broadcast, usually in two parts;
3. Identification of participants and receiving conditions;
4. Participants to respond "All okay and standing by";
5. V.N.Z. directions to change frequencies etc, if not all okay.
6. Announcement of Nursing School of the Air Broadcast Rules:
    - Topic 1 to be given: Break for questions- each location in alphabetical order will be called to ask any questions. Reply 'Yes' followed by questions; Reply 'No, all okay'; questions will be recorded and replied to by lecturer, once all questions have been recorded for all participants.
    - Topic 2 to commence if applicable. Questions and replies handled in the same manner as for Topic 1.
7. Any final comments from participants.
8. Close of session, announcement of next broadcasting date.

In establishing who could and/or who should participate in the broadcasts, all hospitals who have access to R.F.D.S. transceivers and relate to the Port Augusta base were contacted. Without exception all were eager to try this new educational method. Other participants were nominated by the Medical and Nursing staff of the R.F.D.S. as they were aware of many ex-nurses living on isolated pastoral homesteads who fulfilled a primary health care role. Many of these people decided to join in.

So on the third Friday in November 1984 the first broadcast of Nursing School of the Air was made with a potential audience of some 50 nursing staff in 20 different locations in South Australia, Queensland and New South Wales.

At all broadcasts an attempt is made to have an off-duty R.F.D.S. Medical Officer present so that he/she can answer questions outside the area of knowledge of the Nurse Educator or other co-opted presenters. A second benefit of having the Medical Officer available at the broadcast is that it allows the rapport already established to continue. It should be noted that if the Medical Officer cannot be physically present in the studio, it is possible through the Royal Flying Doctor Service network to contact him/her either in the car or in the R.F.D.S.. aircraft should he/she be away from the base.

To date, the following lectures have been given over Nursing School of the Air:

Review and Revision of Immunisation
Assessment of the Nervous System
Assessment of the Respiratory System
Assessment of the Gastrointestinal System
Assessment of Psychological Status
Assessment of the Endocrine System
The Patient with Raised Intracranial Pressure
The Nurses' Act of South Australia
Review and Revision of Cancer Management
Assessment of the Cardiovascular System
Assessment of the Urinary System
Assessment of the Musculo-Skeletal System
Introduction to Psychiatry
What is Mental Health / Illness
Child Behavioural Problems
Coping with Depression
Intervention and Crisis Management of Psychotic States
Progress of Nursing Education in Colleges

Topics for the next five broadcasts will cover the following subject areas:

Immunisation Update
Dietary Fibre
Osteoporosis and Menopause
Diet and Heart Disease
Children's Food

Since its inception, and as reflected by the diversity of topics, it has been found that many health professionals are willing to give lectures using a radio transceiver. Of course some have the initial 'Mike Fright' but it has been found that if an experienced radio operator is with the lecturers, all is okay.

Despite the best intentions in using such methodology for the dissemination of educational material, factors do prevent participants joining in. A survey was conducted in November 1985 after one year of broadcasts and the following reasons indicate why participants did not always listen in:

- electrical interference causing poor reception;
- forgot about broadcast time, hence transceiver not turned on;
- hospital very busy with influx of patients;
- topic did not interest participants;
- shearing time, could not get out of the kitchen to participate;
- having a baby during that time;
- did not know how to turn transceiver on;
- aerial had fallen down.

CONCLUSION

Nursing staff working in isolated and remote areas must of necessity fulfil many health roles. The development of a Nursing School of the Air has been an attempt to bridge the knowledge gaps which appear due in most cases to inadequate preparation of nurses for situations in which they find themselves.

Nursing staff who have participated in the broadcasts have indicated a strong support for this teaching method. This is evidenced by the unusually high response rate to the evaluation questionnaire (60 out of a possible 61 responses were received) and to the considerable number of participants' suggestions for additional topics.

It is therefore suggested that Nursing School of the Air be established at other Royal Flying Doctor Service Bases in Australia, with coordination by State organisations responsible for continuing education of nursing staff in remote areas. Like most Government organisations somebody will attempt to block a new idea by telling you it will cost too much. In reality Nursing School of the Air costs about 80c per student per broadcast, so please do not be deterred by such financial constraints. It is an exciting way to provide continuing education at a distance.

REFERENCES

Adam, E. *To be a Nurse,* Sydney, W.B. Saunders & Co., 1980.

Page, M. *A Pictorial History of the Royal Flying Doctor Service,* Rigby, 1982.

Hill, E. *Flying Doctor Calling,* Sydney, Angus & Robertson, 1984.

Royal Flying Doctor Service, *Australian Unique Outback Medical Organisation,* Sydney, Federal Council R.F.D.S.1984.

Thornton, R. N. *Nursing School of the Air - A Research and Development Study,* Outreach Nursing Education Service, 1985.

Thornton R. N. *Nursing School of the Air,* Australian Nurses' Journal, July 1986, pp 50-59.

Enquiries : P.O. Box 1996
Port Augusta S.A. 5700

Phone 086 42 6788

WORKSHOP 1

Summary

In terms of study guide presentation, workshop participants considered topics such as: the varied nature and forms of study guides and the importance of coordinating all components/units of a course, as well as linking up with previous knowledge; various textual design features including advance organisers (especially statements of objectives), levels of language, personalisation of material, the role of summaries and in-text questions and the development of these techniques to facilitate deep processing; techniques for building in assessment, particularly through measurement of objectives and providing relevant assignments for students.

In terms of study guide preparation problems such as time, flexible use of material and reluctance to share materials were discussed. The advantages of using instructional designers and sharing expertise were considered, along with related implications in dealing with issues such as peer evaluation or situations where experts in subject areas may not be the best writers.

NOTES FOR WORKSHOP ONE

Title: How to write an effective Study Guide

- some things to consider:

a. Writing Study Guides

i. use various levels of language:
  - didactic conversation
  - presentation
  - explanation

ii. engage students' interest with:
  - student activities
  - intext questions
  - model answers

b. Advance Organisers

Introduction by lecturer
Objectives
Clearly stated expectations
Assumption - context of prior learning
Timeline for pacing, e.g. 10 hours per week
Placement of assignments and exams
Assessment procedures and ground rules:

- appropriate
- varied
- part of learning process
- surface and deep abilities tested

Help:
- how and where to get help
- for administrative issues (60% of queries)
- tutoring help, telephone, red sheets.

c. Testing Your Study Guides

- formative evaluation/field testing
- 60/60 to 90/90, i.e. 90% of students clearly follow 90% of your writing
- correcting the ambiguity or our writing in teaching
- using peers as consultants to clarify our content
- using students or surrogate students to improve:

  * communication of information
  * time needed
  * levels of difficulty

Some examples:

- at Open University with Computers in Education tested two year course with 12 teachers as students over 12 weeks
- Ken Komoski with his Learner Verification Analysis in his New York Educational Evaluation Centre uses three average students to work through study materials
- we have involved smaller groups of 15 first year students to comment on materials each week with insert sheets, e.g. gynaecology.

WORKSHOP 1

Reports from Groups

EXPERIENCE

LANGUAGE
Conversational
Level - include glossary, concepts
Readability - tests
non-sexist

EXAMPLES

Sturt
- students "talked through" texts by use of study guides
- use of printed "Readers" as resource for students
- be sensitive to WHO the students are
- continual evaluation built in

Health Dept:
- use urban and country expertise together to give comprehensive content
- use of practically-oriented ID to analyse problems

Riverina
- make assignments useful to student - relate to individual experience
- audio tapes used as intro. to course brings lecturer into the home
- lectures make boring tapes!!

+s & -s
- + guides allow selective use of texts
- - but confusing if not keyed in well

- + can be flexibly written to suit different students (eg. choice of questions)
- - takes a lot of time
- - experts in area may not be best writers
- - reluctance to share materials
- - audio tapes need planning to sound good, easy to sound boring
- + tapes can close the gap between student & lecturers
- + using multiple media caters for various studying styles/needs

Include in a Study Guide the:

- overall course outline
  and/or
- overview of unit's content, organisation, assessments, critical dates
  and/or
- breakdown of sub-units/models within a particular unit/course

Critical that study guide coordinates and links all units/sub-units, expectations of course, intro. to the course/teachers/ learners etc? A type of advance organiser as an advance planner, BUT advance organiser is NOT an introduction as a study guide is.

Ideas of how to link earlier learning/units of study with later learning in a distance education course - clarify desired end products/objectives and work back.

SUGGESTIONS

Student Interest activity

- cartoons
- direct reader to watch video
- check textbook
- voice monotony is problem

Textual Design
text
- left justified
- columns per page, words per column
- type vs print
- colour
- journal copies (small print)

- consistent referencing
- abbreviations - out or in glossary
- introduce guide with your assumptions
- pre tests for students understanding of his/her knowledge level
- use team approach - strategy
- use advance organisers
- spell out your expectations
- indicate time on assignments
- start with 'real' examples
- turnover time for assignments
- build in evaluation
- provide guidelines to students about writing assignments, referencing rules etc.

- definitely need some form of written material to introduce the overall course/individual units - their organisation, objectives, assessment requirements etc.

- clarify the desired terminal objectives of the total course and individual modules/units and consider the individual learning styles of the learners - choose more than one means of conveying the message ensuring each media is also congruent with the new knowledge, skill, attitude to be learned.

WORKSHOP 2

Summary

The role of non-print components in study material was generally considered to be secondary to print. Suggestions for effective use of audio tapes included their potential for introducing a unit and personalising the learning process, to aid in reading diagrams and to correlate with study guides through bar coding. The potential of video was discussed for presenting case studies or problems and for clinical demonstration. The use of multi-media components was seen as a means of catering for various study styles and needs.

Limitations such as the following were considered: the need for planning and voice variety for audio tapes to sound good; the need to relate multi-media effects to the message conveyed and the learning styles of students; the need for national cooperation in the development of clinical training videos; time constraints and prior preparation involved in teleconferencing; and the need for relevance and variety in the use of graphics.

NOTES FOR WORKSHOP TWO

Title: **The use of Non-Print Components in External Study Material**

- audio
- video
- slide/audio tape
- wall charts
- microfiche
- computer disks
- kits

CONSIDER:

- all students have easy access to audio and video replay units - replacement for non-return $2.50 and $25.00

- as educators we have grown up in oral tradition, print alone for teaching is foreign to our own experiences

- cost of audio is comparable to print, i.e. a 60 minute tape contains 15 pages of information. Fifteen pages at 6 cents per page costs 90 cents; a blank 60 minute audio tape costs 80 cents

- if using audio and video it should be -
  * integrated with print presentation
  * examinable and not just enrichment

- media selection, use audio or video not for its own sake, but because the presentation of the topic will be enhanced by the visual and audio medium

- use the normal lecturer as presenter, not an outside ABC style figure - these media should be but an extension of the lecture room

- use studio, location, stills, slides and graphics.

Audio - some uses

- an introductory tape to introduce the lecturer, the importance of the subject, its place in the course. Consider your introduction of yourself and your subject as your first on-campus lecture each semester
- talk with some of your last year external students and share with your new students their ideas, experiences, suggestions re the unit

- talk around difficult parts of your unit

- use of audio print, i.e. walk students through diagrams, charts, equations, etc.

- interviews with experts

- tapes with guest speakers who have been on-campus

- some audio examples.

VIDEO

- produce or purchase

- quality and slickness of production

It is important that there is quality in video productions so that there are no glitches in editing, pictures are focused, the camera is study, scripting is clear and unambiguous, good titles, introduction and objectives

slickness - do not need drama or natural history production cost, but visual presentation of element of your unit

- examples:

  clinical demonstration
  trigger tapes for discussion on patient treatment or lab. methods
  description of libraries and searches.

Other non-print options:

Slide/audio tape .presentations
Wall charts
Microfiche
Computer disks
Kits

Reports From Groups

AUDIO AND VIDEO

- for enrichment only or as part of course
- table of contents, indexing
- tape for student to record on
- help via telephone
- audiotaped course evaluation
- taped interviews with patients
- trigger videos

SUGGESTIONS

- introductory tape
- photo of lecturer
- audio to aid reading through diagrams
- videotapes as support, not exclusively

UNIT GUIDE: IDEAS AND PROBLEMS

Reports From Groups

1. Deep and Shallow Processing

To facilitate deep processing:

- questions
- learner-centred activities/exercises
  - problem-centred
  - teacher or student initiated
- use of learner contracts
- seeking rationale/principles/theoretical basis of eg. a manipulative skill
- case studies - simulated/real life
- use of stories to illustrate a principle

2. Problems Involved in Writing Materials

- personalising written materials
- coping with peer evaluation of own materials - tendency to write for one's peers
- presenting personal views/opinions versus personalising written materials.

3. Audio Materials

- tone/ intonations/variety by having different voices reading/saying information.

4. Bar Coding

- number the study guide and number the tape so that a particular location on the tape can be correlated with a specific section in the study guide

5. Videos with Study Guide

- introduce lecturers/resource persons
- trigger tapes to
  - present a case study or problem
  - stimulate debate/discussion
  - enable analysis of attitudes and values
- demonstrate clinical techniques/ clinical skills learning
- used to
  - demonstrate
  - motivate
  - stimulate etc
- problem of obtaining multiple copies of commercially produced films/ videos etc. for the distance education mode - need to establish nationally accepted workable mechanism/criteria for this
- suggestion that nurses co-operate on a national basis to create and enable the production of a set of core videos to be used in "bridging" courses for RNS wishing to upgrade to Bachelor degree level - each institution/

organisation could develop own course incorporating the core videos

6. Learning Network

- potential sources/means of providing distance education using ABC TV
- need to provide continuing education on "how to be an effective distance educator".
- problems/limitations of *teleconferencing:*
    - everyone has to be available at the same time on the same day and at a location which has teleconferencing facilities if in a group or has a telephone for the individual
    - takes a lot of preparation
    - involves fairly rigid pacing of students' learning to fit into the scheduled teleconference

7. Graphics

- have a definite place in DE to add variety, stimulate interest, gain attention, highlight points/sections in a study book that are repeated throughout the book
- importance of achieving a balance between consistency and variety using headings, boxing, coloured pages, sequence
- use of cognitive/learning style assessment to select instructional media

8. Summaries

- do summaries lead to lazy learners?
- research indicates summaries at end are more effective than summaries at the beginning
- can be used as "deep processing" method.

9. In - Text Questions

- stimulate thinking, problem solving
- use of theoretical questions
- deep processing requires students to explore in more and more depth via questions which introduce new concepts/attributes of a concept/ concepts of a principle - is a process of discovery learning

10. Assessment

- are learners over tested
- much assessment is at cognitive level of recall - inappropriate
- should be moving towards
    - mastery learning
    - competency - base learning
- computers have a role in learner assessment
- assessment items should be linked in/cross-referenced with unit objectives and areas of content; learning experiences in the DE course
- use of short answer questions to stimulate learning via feedback of progress

11. Diagrams/Photographs

- too many labels
- not sufficient explanation in-text
- significance if the diagram/photo is best to the learner (? and often the teachers as well).

WORKSHOP 3

Summary

Issues which were considered as problematic in providing satisfactory clinical and laboratory training for external students included: the creation of uniform standards in clinical training, and in coordinating practice with the theory provided by the educational institutions; the development of teaching/learning skills in hospitals and the facilitation of guidance by the educational institution; the determination of appropriate clinical experiences and their facilitation to the extent, at the time, and in the locality required; costs of clinical training and means of retaining experienced clinical instructors.

Suggested means of providing and monitoring clinical instruction included: job sharing; the establishment of joint-tenure service between CAEs and hospitals; training all RNs to teach and making the WIAE course available to other educational agencies; the provision of continuing education for clinical instructors and the creation of professional experience committees to monitor clinical training and assessment.

The use of task analysis was suggested to determine the learning experiences required and video was seen to have value in backing up and updating clinical teaching, and for use with students in a clinical activity to develop self awareness. In relation to costs, communication with Nurse Registration Authorities was suggested.

NOTES FOR WORKSHOP THREE

Laboratory and Clinical Components for External Students; The Training of Clinical Teachers and Preceptors

For this Workshop, each group will have a set of four modules that comprise the "Clinical Teaching" Unit prepared by Lorraine Kelly and Tony Barnett of Warrnambool IAE. We also have an additional leader for each group to work you through these modules, but firstly take time to:

- identify the clinical experience requirements for a nurse education program
- consider how these needs are currently met with "on-campus" students
- note the differences for external graduate and upgrading students
- recognise that other disciplines have faced the issues in giving their students experiences during study, e.g.

    engineering and applied science often require their students to undertake approved work during vacations

    teacher training programs require teaching rounds in schools.

These programs have developed many strategies that are worth examining by nurse educators in areas of:

selecting suitable environments
training supervisors
communicating with and visiting students while on their "rounds"
developing assessment procedures.

REPORTS FROM GROUPS

Problems

Uniform training of clinical supervisors/ preceptors
Construct validity in system of hiring clinical instruction
Objectives/Standards/Expectations
Correlation of Theory and Practice

Experience

Evaluation - by lecture
by student

leads to -

upgrading of orientation
eliminating poor performances
financial reimbursement
academic credit
selection criteria -
  two years post basic experience
  clinical practice current and in specialty

Suggestions

Professional experience committee - advise institution - comprised of clinical supervisors - working party - clear end point
Job sharing, joint appointments
Case - team approach to community prac - may go with a non-nurse team method

GROUP B

Experiences and Examples

- theory and practice are often distanced from each other in traditional nurse education
- nurses in London four year educated in "the wards" via Keller plan - great nurses - poor exam candidates
- WIAE - teaching remote clinical teachers via DE - too many of hospital RNs not just CTs

Ideas/Problems

- Don't necessarily know "quality" remote agencies/clinical teachers
- can undergraduate students be taught at a distance? Trained nurses can be - as post-grads.

Suggestions

- All RNs must be expected and educated to "teach"
- WIAE course available to other educational agencies
- development of objective assessment of clinical practice

GROUP C

Laboratory and Clinical Components

- Program an excellent means of training preceptors
- General lack of trained clinical teachers in hospitals - actually a lack of teaching/ learning skills
- Communication of the philosophy of your approach is essential at the outset
- General lack of guidance/objectives provided to clinical supervisors by institutions providing students
- Videos for backup and updating of clinical techniques - a range available from Family Medicine Program
- Possible use of portapack to video students in clinical activity to enable students to view themselves - self education to some extent

GROUP D

Clinical Experience Requirements

Student Nurses (Pre-Registration)

- families during pregnancy
- maternity unit (acute care institutions)
- caring for needs of children
  - in health
  - during ill-health in a variety of areas (e.g. surgical, medical, rehabilitation)
- caring for/needs of adolescents (as above)
- caring for/needs of adults/elderly people

Problems (any Nursing Ed Course)

- Experience not available in localities of students
- Transport/accommodation of students at site of clinical experience

Procedure

- Who decides what constitutes adequate clinical experience in quality and quantity?
- Can the student decide what clinical experience s/he needs? type, location?
- Task analysis required to identify firstly the skills to be learned and secondly the ways/sequence in which these skills are developed, planned and implemented
- identification of critical elements constituting each skill identified with task analysis
- identification of the learning experiences required to develop the skills

- Competency-based learning can facilitate the sequencing and choice of learning experiences

- Aims/objectives must be reasonable and written

- Acceptable ratio of students: clinical instructor (e.g. 9:1 is based on the assumption that all students are located in one place where continuous, shared instruction is possible - does not allow for students separated by wards or even institutions

- Perhaps can accredit suitable hospitals which have/accept responsibility for providing clinical instruction of adequate/appropriate quality and quantity

- Example from Applied Science Course

- Mentor gets objectives and learning guide that students get

- Mentor (preceptor) also gets additional information, e.g. clinical instruction role/ functions/processes
  - assessment procedures, policies, etc
  - assessment/evaluation standards

Problems of Competency-Based Learning

- time constraints and self-paced learning
- availability of the right experience at the precise time it is required in the learning process of individual students

Other Problems

- large number of students all wanting the same sort of clinical experience at the same time

- having enough of the right sort of specialised supervision/clinical instructors available at the time they are required

- impact of new nursing career structure on the supervision/provision of clinical experience - skills of on-site RNs demanded by role/job descriptions and standards - the problems of "preceptorship"

- SACAE use "clinical associates" to overcome problem of supervision and clinical consultation for learners

- should/will clinical instructors want to be paid for additional knowledge/skills required of them?

- joint tenure of service between CAEs and hospitals providing the clinical instructors and clinical experience

- college-based education enables selective choice of the clinical instructor and services as a means of recognising a person who is a role exemplar

- who has responsibility for orienting/ educating the clinical instructor? Is this necessary? How can the education of the clinical instructor be best achieved?

- continuing education for the potential/ actual clinical instructors

  funding for this education a major obstacle

- clinical experience is a very expensive component of a nursing course - must plan now for ways to prevent experience being imposed by governing authorities because of cost

- need to communicate these problems and predictions to Nurse Registering Authorities that have the legal clout to prevent clinical experience and quality on basis of cost

- need to provide clinical experience which caters to needs of local region versus clinical experiences deemed to meet generally accepted professional standards - these could differ?

- the aims/nature of hospital-based courses is different from college courses - therefore different clinical experience may be sought? implications in future

- retention of experienced clinical instructors/ supervisors (preceptors) can be a major problem. How can we retain these people longer? Warrnambool CAE have a system that seems to work well.

COMMENTS AND HIGHLIGHTS BY PARTICIPANTS ABOUT WEDNESDAY, 11 FEB.

Many people commented on the value of the session in presenting the potential of technology in distance education - radio, television (satellite), Viatel and teleconferences. Others commented on the usefulness of ideas relating to the writing of study guides and the value of networking in developing distance education packages. Some mentioned the value of ideas relating to clinical supervision.

Many of the comments on useful strategies also referred to the above areas. There were some particularly positive comments about the day, although one participant felt that the workshops lacked direction.

The Question asked of participants was:

A. Would you please note main ideas from Wednesday's sessions which were of value to you as a nurse educator:

* Possibility of having a Nursing School of the Air
* Aboriginal Health Worker Training using Media
* The use of bush radio in nursing education
* Innovative teaching of health education specific to aboriginal needs
* Education of remote area nurses - the use of radio and the potential for elsewhere
* Nursing School of the Air - useful ideas
* VIATEL - innovative
* Satellite technology can deliver high quality transmission but the cost of dishes and equipment can be prohibitive
* Education program to bush nurses by radio
* Excellent use of TV by Gail. Gave me ideas for content of videos in External programs
* Teleconferences gave me ideas for interaction with country groups
* Education of clinical teachers by External Studies
* Taking Further Ed/Updating to remote areas
* Potential use of teaching strategies for untrained health workers
* Reassurance of each other's own expertise
* Ideas on developing for ongoing in-service training for RNs and health workers
* The information given on how to write an effective study guide is excellent and most useful
* Workshops on writing of effective study guides and use of non print components gave useful ideas
* The development by individuals of innovative programmes directed to different groups. The emphasis on analysing the needs first
* Clinical supervision problems shared during workshop
* Clinical teaching package at Warrnambool open for use - excellent
* To be able to network with people who may have similiar interests, and responsibilities
* The importance of group planning with experienced people
* Ascertain the resources already available or organisations willing to share costs for establishing infrastructure. Willingness of GIAE to print material for DE elsewhere
* Preparation of students is essential
* Preparation of 'preceptors' essential
* Importance of sharing prepared material and of teams (not one person) preparing new material
- Financial difficulties

B. Would you please note strategies from yesterday's sessions which you would like to incorporate in your distance education course in nurse education

- Use of community radio - television
- Development of video resources
- Use of computers
- 'Voice' interaction eg. radio/ teleconferencing
- Audio Visual ideas
- Development of videos and use of teleconferences
- Interaction sheets for broadcast with backup feedback sheets
- Use of telephone
- Teaching trigger films - How to teach
- Education by walking around
- Clinical instructors package - adaptation for community based preceptors
- Including nurse consumer in development of programs developed for them
- The use of the checklist when writing learning packages
- That distance education is a viable method and can compare favourably with face to face teaching
- Ideas in actually writing study guides and administering such a program
- Ensuring Distance Ed is needs assessed
- Team approach in preparation of distance education

C. Comments

- A rewarding day with much sharing of ideas
- The sessions were fantastic, well worth travelling a long distance
- Excellent for internal/formal data processing
- Really enjoyed the day
- Must commend Bob Thornton and Gail for their presentation
- Loved Gail Perry's presentation
- It was good timing to get into workshops
- Good choice of Red Wines
- I promise not to drink red wine ever again!

Day Four

Thursday, 12 February 1987

9.00 am	Peter Williams, Royal Australian College of General Practitioners - Discussion and demonstration of course using Viatel.
	Anne McMurray and Angela Parker, "distance Education for the Remote Area Nurse. what can and cannot be taught by Distance Education".
11.00 am	Two options for Workshop - A and B

Workshop Four

11-12.30 pm	Setting up a DE system, administration and production systems. Student services and peer support for DE students
1.30-3.30 pm	Plenary Session Reporting back from workshops Quo Vadis

THE USE OF VIATEL IN THE FAMILY MEDICINE PROGRAM

by Dr. Peter Fleming

The problems of providing accessible, interactive high quality continuing education to members of the Family Medicine Program (FMP) are similar to those in nursing and many other professions where people scatter widely after the completion of their initial training. On of the answers is Viatel which reaches every corner of Australia, wherever there is a telephone. The charge is the same from Alice Springs, Darwin or Perth as it is from Melbourne, and is quite small. You need only a small terminal and access to power, telephone and a TV set.

The FMP system is called 'CHECKUP' which means 'Computerised Home Evaluation of Clinical Knowledge, Understanding and problem -advising.' The aim is to provide a computerised bank of knowledge questions and patient management problems which are accessible to trainees and general practitioners anywhere in Australia. The bank already contains 8,000 questions and will eventually hold about 20,000. The patient management problems are very large interactive clinical problem-solving exercises with about 1000 standard questions on each. Due to cost, only few of these problems are being put up at a time.

The knowledge questions are in sets of four parallel questions: a user will move first accross the A questions, and on subsequent uses the B, C and D questions. This is to provide fresh questions if a user wants to be re-tested but it also allows for detection of weaknesses in particular areas; if 1A is answered correctly, the user moves to 2A and so on through the A questions; if 1A is answered incorrectly the user is given 1B, 1C and 1D to check whether a real weakness has been discovered or whether the incorrect answer was just a slip.

If B, C and D are answered correctly the computer does not record that, and the user goes on. However, if B, C or D is answered incorrectly, and thus at least two errors have been made, it is assumed that a real gap in knowledge has been detected and that is recorded and fed back at the end. If B, C and D are answered correctly but later the answer to 3A is wrong, so again two errors have been made (1A and 3A) the computer records that as being a topic requiring attention. Hence, the whole purpose of the system is to detect weaknesses.

The questions are True/False questions which is satisfactory for formative assessment. Currently there are explanations with some answers but all questions will have these in the future. The user is able to focus on particular topics by going through the menus and specifies, at the beginning, how many questions are required. At the end, feedback is of two types: for random questions, only those requiring attention are listed; for questions on particular topics, a list of all topics attempted is provided with an asterisk against those which require further attention.

The patient problems are of three types: management problems (MEQ type); diagnostic problems (PMP type); and examination problems which are automatically and instantaneously scored. Diagnostic problems provide the opportunity to make a diagnosis and at the end the actual diagnosis is given, together with a case commentary on how the problem should have been worked through, and feedback on the items chosen by the user. This can be compared with that of two experienced general practitioners who have worked through the problem.

No information on individuals is stored on the computer, only statistical data to allow indentification of weaknesses of particular sub-groups such as FMP trainees, Resident Medical Officers, or General Practitioners. If questions are not being answered correctly, it may indicate that the questions themselves are faulty, so this information is also used to refine the system. Comments from users at the end of a session provide another source for system improvement.

The system is largely paid for by advertising, which appears on the top of the questions. There is provision for 10 advertisers on the system and they can have up to 10 advertisements each.

There are many future options for the system: public access - a public health information service; locum advertising; college events, conferences and meetings; a cumulative index of the journals; courses and resources available for advanced training; drug information; catalogues could be provided and ordering could take place on the system; developments in different parts of medicine or health; international travel and health risk status. The system could also be used for computer conferencing; electronic mail, and research audits - laboratory and hospital results could be sent back on the system instantaneously.

This system offers tremendous potential for its users and is the kind of system which lends itself to adaptation for educational or other uses by any professional group which needs low cost and efficient communication amongst members who are separated by distance.

WHAT CAN DISTANCE EDUCATION OFFER THE REMOTE AREA NURSE?

By Anne McMurray and Angela Parker-Siahaan
Curtin University of Technology
School of Nursing

ABSTRACT

As a primary health provider the remote area nurse is responsible for coordinating holistic, interdisciplinary care at all levels and throughout all sectors of the community. This specialised group of nurses has repeatedly identified the need for continuing education systems which do not add to the burden of isolation, but which reflect the needs of the adult learner. Ongoing education is required to: maintain clinical, coordination and managerial skills; develop new skills for future problems and challenges; facilitate networking and professional liaison and satisfy organisational and political requirements. Distance education technology is both appropriate and vital to fulfil these needs. As the group with the clearest insight into the unique nature of remote area nursing, the impetus for developing distance education materials and improving access to them must come from the nurses themselves. Technology facilitating such systems is discussed, and the suggestion made that nurses capitalise on their creative and innovative capacities to achieve the necessary improvement.

At those conferences which address continuing education for the remote area nurse, discussion often centres around the difficulties associated with access and delivery systems. This paper focuses on the product and ways in which the remote area nurse can stimulate the development of DE materials. It is therefore presented in the context of a remote area nurses's assessment of the needs inherent in the role. Any future-oriented direction must match these needs with distance education systems which are both available and evolving, and implemented in a way which is practical and appropriate to the unique conditions of Oceania.

THE REMOTE AREA NURSE

In the purest sense the remote area nurse is a primary health care provider, charged with coordinating holistic, interdisciplinary care at all levels. At the primary level efforts are directed toward health promotion and protection of the community. At the secondary level the nurse functions as client or patient advocate and care provider. At the tertiary level activities are centred on health restoration and rehabilitation. Common to all three levels is a commitment to the philosophy of self-care. Collaborative decisions are made according to those compromises which allow the individual, family and community to perform and maintain self-care with a minimum of interference from the nurse and other health professionals. The task is therefore very weighty, demanding 'wellness' oriented teaching and managing expertise, and it is necessary to identify the most important requirements for the role.

ROLE REQUIREMENTS

There are four distinct needs for performing the role of remote area nurse. These are:

1 the need to maintain clinical, coordination and managerial skills
2 the need to develop skills which prepare for a future which may provide scarce resources and unidentified needs;
3 the need to capitalise on skills for networking and maintaining contact inter- and intra-professionally;
4 the need to satisfy organisational and political requirements.

It is my contention that technology can assist in each of these vital areas.

HOW TECHNOLOGY CAN HELP

Nursing technology includes all those educational, mechanical and creative aids to practice as well as modes of delivering or facilitating care. In the past nurses have been hesitant to involve themselves in the process of technology, preferring to consult a technical specialist. The result, according to Brewer: "...was that this led to the fragmentation of patient care." She outlines factors influencing the process of adaptation by nurses to technological change, including: "...technological complexity, stress and degree of work satisfaction experienced by nurses." I would like to suggest that rather than being a detriment to practice, technology can facilitate skills maintenance, health care planning, networking, communicating and politicking with minimal complexity and stress, ultimately leading to an increased degree of work satisfaction.

SKILLS MAINTENANCE

Nurses who work in isolation have repeatedly identified the need to be informed of new strategies for care giving as well as maintaining current skills. Specifically, requests are made for education which is:

- relevant, systematically and appropriately presented at convenient times and places;
- non theoretical in its approach;
- considerate of the adult learner.

One way to provide for appropriate content would be to adopt an interdisciplinary team approach in the development of programs and/or modules. In primary health care nursing duties include any activity judged by the nurse to be necessary to meet client needs. Therefore, an elitist 'nursing duties' *vs.* "non-nursing duties' orientation is irrelevant and should be pre-empted by the breadth and practical usefulness of learning. It seems logical therefore, that the nurses' educational inputs must come from the disciplines and technologies of all team members.

I am suggesting that we become both producer and consumer of distance education taking our networking capabilities a step further than information sharing, by collaboratively devising educational 'products' to assist skills maintenance. The content of such products must be devised creatively. Many clinical skills can be effectively illustrated on videotape. In fact, the camera often captures the detail which may be missed even in small tutorial sessions. When thoughts are committed to videotape they are often more carefully contrived and undoubtedly more enduring. Further, although videotaped presentations of clinical skills lie within the nursing domain, others appropriate to maintaining management and coordination skills lend themselves to interdisciplinary development. It is often true that by correlating inputs from management science, business experience, social work and behavioural sciences, a clearer reflection of nursing needs becomes apparent. If nursing needs are constantly interpreted by nurses from the nursing discipline, we will not be forced into the lateral thinking or critical thinking essential to problem solving.

Additionally, use of a learning support 'package' devised with the help of an instructional designer often results in a more educationally sound teaching session than traditional classroom methods. Most support packages are designed for external students and contain a checklist to ensure that such things as learning objectives, pre-reading materials, follow-up references and resources and evaluation strategies are included. The impetus to develop such materials must come from those of us in the field, using our influence to persuade continuing and inservice educators to respond to our needs. Most importantly, policies and mechanisms for sharing educational products must be devised to consolidate ideas, maximise resources and promote cost containment.

In addition to facilitating product development for continuing education, there are many ways of producing effective aids to practice. These include such important projects as designing posters to encourage the Aboriginal nomad in positive hygiene practices; organising a community awareness campaign with a little help from artists, media personnel, and school children; and producing a videotape with local townspeople role modelling health in any aspect. Each is an almost certain immunisation against health breakdowns. For these and other techniques we must learn to appreciate and cultivate awareness, instructional and attitude change techniques, recreational forums for communicating with our community, and aesthetic aspects of living, including getting in touch with ourselves and our strengths in this area. All of these strategies lend themselves to the distance education medium. Clearly we must share in both production and dissemination of health teaching; we must include and be included in others' attempts to accomplish similar goals for the present and future.

SKILLS FOR THE FUTURE

In a situation where there are unpredictable demands individuals must become adaptable and open to innovative ideas. Learning about different modes of technology is necessary to improve delivery systems to both the nurse and his or her client population. This includes becoming knowledgable in the areas of computer and other media techniques. With the relocation of nursing education to the tertiary setting, access to production facilities is often attainable. For example, at Curtin School of Nursing, a complete set of physical assessment videotapes has been made by a team consisting of a nurse, technician, and producer at the media centre. These and several other teaching tapes are being sold at cost to other agencies involved in the continuing education of nurses. A workbook and instruction sheet outlining how to facilitate a learning session is included with the tapes. These print materials were developed in conjunction with an instructional designer and graphic artist. Across Australia,Heads of College Schools of Nursing have agreed to share such educational aids, keeping costs to a minimum and compiling a directory of the materials and their source. Such collaborative efforts ensure a mechanism for enquiry and guidance for future projects.

In the long term such videotapes can be turned into mini programs for transmission over educational television during 'down time' when no commercial use is made of the broadcast channel. Hospitals, clinics and other community health agencies can record them for inservice or seminar sessions at any future date. By adding the satellite mode of transmission, and a receiving 'dish' located in the area programs can be picked up and relayed to a person's home, school or other centre. The way this works in practice is simply that a person switches on his/her television set to view the module or program while following the instructions for learning in the course workbook.

Programs used in this way provide information on such diverse topics as improving interviewing skills, explaining the nursing process, leading groups and understanding recent medical developments. Many address topics of interest to communities, such as parenting practices, immunisation, sexually transmitted disease and resources located in the community. The key to program development is to approach each project as an 'expert system' combining a subject expert (a resource person), a logician (a director), and an organising intermediary (the primary health care nurse). If we begin to think and plan in these terms, it could ultimately lead to involvement with computerised expert systems, thereby contributing to the entire profession. The first step is to become familiar with, and thus demystify, the terminology and capabilities of information science. For example, systems analysis is a problem solving process which is conducted in a manner similar to the nursing process.

By proceeding in stages we can progress from understanding the technology to gaining access to the relevant information through print, video or disk libraries, to developing such systems according to our needs.

SKILLS FOR NETWORKING AND COMMUNICATING

The most basic and effective means of communicating with one another is by newsletter. There are so many innovative ways of solving nursing problems which never get passed on to our fellow isolated nurses because we hesitate to engage in what seems like a non-nursing, low priority task: devising interesting, friendly information exchange to promote efficiency and collegiality.

Suggestions can be sent to other nurses via memo, letter, journal or through a redesigned documentation procedure. To use more extensive media supports an understanding of information transmission is vital. The vast amount of information disseminated by nurses demands that we become familiar with the capabilities of computers, videotapes, videodiscs, television, microwave and satellite. A personal computer for example can help in word processing, speeding the filing and dispersal of reports, papers, statistics and memos. A data base can compile a list of clients, physicians, immunisation schedules and appointments, for easy and fast retrieval. It is a matter of making a computer (or any other piece of technology) work for you, performing the tasks you require.
A videotape can reach an unlimited number of other nurses. Microwave transmission can allow you to send pictures or x-rays over a telephone line. A facsimile machine can send a form, patient record, or a set of orders to anyone who also has one of these revolutionary machines. Educational television can be the vehicle for health education messages, some of which are beamed to other remote areas via satellite.

Another way of using 'technology' is to implement alternative continuing education systems. A visiting 'locum' nurse hired by the community to provide a series of inservice sessions in a specialty area can be extremely cost effective. Such a nurse visits small areas throughout the community working with groups of nurses and/or other team members, and utilises the educational systems provided. Attending management courses to develop coordination and management skills is, although desirable, not often achievable. Individualized study can often be designed around interaction and team inservice with business people, health professionals, teachers, and preceptoring student nurses in the local community.

ORGANISATIONAL AND POLITICAL REQUIREMENTS

It is necessary to keep the lines of communication with head office, regional and local centres open constantly. The flow of information is essential if we are to be seen in the vital role of contributing to epidemiological studies, evaluating our nursing actions through research and playing a part in decision making to benefit the community. It has been suggested that as nurses and as women, we have neglected to market our skills, promote our image, lobby for our convictions and thereby elevate our profile. We cannot function in these roles if we approach our listeners from an emotional perspective. It can be accomplished with education, with pursuing new pathways, exploring the technologies as they evolve, researching their effectiveness in our sphere of work and not hesitating to look beyond our traditions. One cannot move with ease within and without an organisation unless there is some awareness of power and authority structures, political lobbying techniques, assertiveness skills and a strong sense of professionalism. Those who hold the power in organisations are usually those who have the greatest access to information. Striving to surpass the baseline of nursing knowledge by distance education can be richly rewarding, promoting creative approaches for the future.

CONCLUSION

We are both blessed and thwarted by distance in this part of the world. It is only by confronting it that it will not be allowed to remain tyrannical. We must overcome the anxiety of technology and embrace change. We must invent and innovate, share and extend. We must provide others with access to our information and our practice. We must allow ourselves to experience and be experienced. We must conduct nursing and non-nursing activities without apology. We must create and take pleasure in our role, to entice the next generations of nurses to the traditions, yet also the challenges and transformations of the nursing profession which practises alongside and together with the societies and cultures of the future.

REFERENCES

1. Brewer, A. M. 'Nurses, Nursing and New Technology: Implications of a Dynamic Technological Environment', *Australian Studies in Health Service Administration*, Kensington, NSW, 1983.

WORKSHOP 4

Summary

In relation to setting up a coordinated distance education system, comments were made on: the variety of staff roles required (eg. for instructional design, graphics, audio visual support, editing, printing, administration, clerical assistance and publication); the student support systems required (eg. academic, library, counselling, peer group); and problems relating to the provision of written materials (eg. time, inexperience, funding, shelf life, review and evaluation factors).

To alleviate some of the latter problems consideration was given to using: a team approach; outside specialists; collaborative efforts between institutions; and cross-crediting. Suggestions were made to reduce funding problems (e.g. cooperation with existing facility, "student fees", identifying sponsors, using existing/similar materials, using CNA to identify funding sources and act as a 'clearing house').

NOTES FOR WORKSHOP FIVE

Title: Setting Up a Distance Education System

To establish a Distance Education System three elements need to be incorporated, each of vital importance:

1. to prepare study materials

   - planning, writing and updating
   - preparation of staff usually trained and experienced only with on-campus students
   - surveying existing materials - Not Invented Here (NIH) syndrome
   - use of course teams
   - collaborating with specialists outside the nursing discipline
   - using outside consultants
   - planning lead time for corrections, printing, production and despatch

   but writing and publishing the "perfect" study guide alone will not ensure a successful Distance Education program.

2. to administer the program:

- identify courses that are needed
- develop courses and seek accreditation from State coordinating authorities and professional organisations
- hire staff and offer professional development programs
- advertise and attract students
- send information
- handle finance
- schedule and despatch study materials
- organise availability of textbooks
- set up student supports, counselling and student centres
- handle daily student enquiries
- check in and monitor all student assignments

and then we can get down to the task of teaching and learning:

3. to tutor and communicate with students

- methods of facilitate communication
- writing style of study guides
- introductory bio-sheet or audio tape
- use of memos, letters
- telephone and teleconference
- weekend and vacation schools
- unit newsletters
- what to do with the 20% who don't respond
- maximise opportunities with correcting assignments - written and/or audio tape comments
- remember that while all your "on-campus" students may be present in class, a percentage seem not to ask questions, not to seek individual help and skip lectures. Some "off-campus" students also seem to prefer to undertake their studies on their own and without much communication with lecturers.

N.B.:

When your organisation learns there has been a 98% growth in external studies over the past 8 years and wants to get into DE quickly and cheaply, advise it on the need to set up a comprehensive system with adequate planning and lead time.

WORKSHOP FOUR -

Reports from Groups

- DE is not just translating conventional face-to-face
- The organisation of the "production and delivery system" must be well co-ordinated
- Being flexible and having at least one HUMAN In the place
- Understanding the administrative/political context of DE in Australia
- Where do resources come from?
- Writing study guides is just the beginning

SETTING UP THE SYSTEM

1. STAFFING TEAM:

- ID's, graphics, editors, materials planning and development staff
- Access to audio staff
- Administrative staff: plan of materials through the process, despatch, tracking system.
- Clerical staff: packaging, mailing
- Publication staff (In small situation one person does a number of above)
- Efficient/Effective Tracking System

2. STUDENT SUPPORT SYSTEMS:

- Academic support - visits, on campus session, phone etc.
- Library support - co-operative academic system reciprocal borrowing rights to external students in the state
- Problem of student access - send copies to regional libraries so students have access. Books returned end of semester.
- *Counselling support* - rapport with at least one staff member on campus: contact - resource person.
- Peer group support - put students in contact with others - networking - provision of names with approval
- Explain relevance of peer group support - permission for students to contact one another, sharing of information; and campus orientation to one another which facilitates interaction in external situation.

QUESTIONS

- Viability of establishing team to run one off courses
- Shelf life? - dependent on environmental changes - 2-5 years
- % of mature age and school age 95% : 5%. Problems associated with school age students adaption to external mode
- Phone contact
  - 24 hour phone service with students
  - recording service

Preparing Study Material

- Problems encountered - how to control
- Care with editing
- Incorrect directions eg. page numbering changed in newer edition. QUALITY CONTROL MEASURES

  Reviews by peers - TEAM approach, reviews of each item by many people

  Annual review for major changes and new information that must be included

  Revision of lists of reading references

  - indicate why the reference is recommended
  - indicate the "essentials", "should" and "coulds"

- * Who is available to do the writing/how can this be done?

  Talk to the "expert" about the subject/ topic - recorded on audio tape - put onto word processor - edit

  Talk your way through a lecture/ diagram using a tape recorder - type up the taped words

- * Preparation of staff
  - remove idea of "training"
  - instead involve the people as members of the Course Development Team - likewise, become a member of a CD team yourself and experience how it is done first hand

- * Problem of DE being yet another task to be done within current workloads and current budgets:
  - cannot "employ" outside specialists
  - insufficient time to do the job well

SOME SOLUTIONS

- co-operate with currently funded, functional DE facility
- students should expect to cover costs
- find a sponsor for individual costs eg. a company to cover telephone costs in teleconferences
- surveying/using existing/similar materials
- obtaining information re funding sources from College of Nursing Australia
- College of Nursing to act as a "clearing house"

COURSE TEAMS:

Must have a designated leader to function, well defined roles, clearly defined parameters - prepare a model unit (incl. layout etc.) where all experts are involved and then use that model in all future writing activities.

Using an "outsider" can often ensure the materials can be understood by persons with less knowledge/skill than the authors

LEAD TIME ISSUES

Need to know exactly what the resources are and understand what can be done:

eg. art work may be planned that cannot be provided by art dept.

TIME the most critical factor - need at least 12 months to prepare for one subject/unit and then trial with a smaller INITIAL student group

Accreditation of courses - issues to be addressed:

- What does it mean to the student to have completed your course?
  - * salary increased
  - * cross-crediting
  - * need for a (national) system for assessing and recognising these courses.

Reading - Library/related issues
- availability of texts recommended in course for loans/purchasing
- using inter-library loan facilities

- * find out what actually is available
- * confirm a suitable mechanism with the appropriate local library/bookshop facilities
- * use of Book of Readings
- * investigate copyright laws/know them/apply them
- * Student Support Systems:

- telephone hookups - conferences
- adressing students of peers in own geographical region
- use of 008 number at DE base
- critical support period - first 2 months of course
- effort to retain students who make initial responses but drop out / lose contact after 2 + months worth the investment

- units with high initial "dropouts" should be evaluated re amount of content/ level of performance expectations

- some students need "How to Study" guidelines or courses so provisions should be made for this

- to whom should assignments go?

* the unit supervisor/marker
* the DECE to process and pass onto marker

4. Comments & Highlights by Participants About Workshop

Participants were primarily interested in seeing the continuing education potential of nurse education developed through distance education in the next 12 months. Areas such as clinical nursing, paediatric nursing and midwifery were mentioned.

Suggestions for further activities strongly emphasised the need for continued sharing and dissemination of information through conferences, workshops, seminars, mini courses and newsletters. Some had particular interests which they would like to see pursued, such as instructional design, cross cultural aspects of distance education and possible accreditation for continuing education courses conducted by distance education.

Highlights mentioned included the enthusiasm of participants, the development of potential for sharing ideas through the interaction of a diverse group of people, and the creation of awareness about what is already being done in nurse education via distance education.

General comments reflected enthusiasm for the conference although a few individual comments suggested scope for the future; an instructional designer and a psychiatric nurse would have liked to have learnt more which was relevant to their fields.

The questions asked of participants were:

A. In what specific areas of nurse education would you like to see distance education used in the next 12 months?

* Pre-registration Courses

* Bachelor of Applied Science Nursing (Clinical Majors)
Bachelor Nursing Administration
Bachelor Nurse Education
Continuing Education

* Continuing education for non-metropolitan nurses - remote
Registration of graduate nurses not currently registered
Post registration courses

* District Nursing Course - particularly country areas. Remote area nursing.
Post Basic midwifery, paediatric, gerontology and many other general nursing areas

* Refresher re-registration preparation
Post registration/degree conversion courses
Preparatory studies for formal nurse education programs
On-going education programs for practising nurses

* Post basic conversion courses
Clinical teaching for RNs who have to supervise students

* Clinical skills development for registered nurses in primary health care situations

* Advanced midwifery
Clinical specialists eg. paediatrics

* Clinical teaching

* Continuing Education Course for Community

* Psychiatric Nurses

* In on-going Post Registration Continuing Education

* In as many areas as possible

* Many of the hospital certificate courses could be developed 3/4 distance education even for nurses who work in the hospital

* VIATEL

* To cater to the learning needs of RNs working in country and remote areas of Australia.
To enable courses in short supply eg. Palliative care course to be offered on a nationwide basis

B. Have you any suggestions for further activities relating to distance education which could be arranged by the Nurse and Health Educators Special Interest Network of the International Council for Distance Education and the Australian and South Pacific

External Studies Association?

- Sharing experiences and difficulties which occurred as a consequence of implementation
  Developing national goals for distance nursing education
- More opportunities - conferences, workshops for people to get together for planning programs for Distance Education
- More workshops of the 'How to do It' kind
- Local 'twilight' seminars on a regular basis, i.e. 5.30 - 7.30 pm
- Annual workshops similar to this one
- Seminars - monthly in Melbourne at a convenient location - Gippsland venue too distant
- Mini-courses or components for educators in DE. DE packages, eg. How to do a Needs Assessment and planning a package
- Discussion of nursing specialists to be offered by DE and rationalisation/sharing out of course development to avoid duplication
- Yes, would like to come back next year!, i.e. Yearly meetings, quarterly Newsletter - with input from members as they develop their projects.
- I strongly support the dissemination of information re directories, conferences and informal networking. Maybe workshops could be arranged to bring together experts to produce material
- Establishment of State Groups and interchange of minutes of meetings
- Newsletter or information brochure from time to time
- On-going liaison - Newsletter? Teleconference? Compilation of reference material on DE
- Workshops on - meeting counselling needs of external students
  Facilitating administration needs of external students
- Ways of accessing DE materials
- Cross cultural aspects or concerns in distance education
- Investigate concept of gaining credits for continuing education courses conducted by DE in recognised formal courses in institutes of higher education. Sharing of developed materials among DE educators

C. What were the highlights for you of this first national workshop on distance education in nurse education?

- It reaffirmed my faith in nurses - it was nice to meet so many enthusiastic people for a change, who are committed to the need for DE in their discipline
- Confirmation and re-ignition of my ideals and plans for future of DE in nursing. National nursing network/VIATEL, television and increase in communication
- Awareness of diversity of program options and the state of development of distance education. The establishment of a most useful network of contacts.
- The enthusiasm of the organisers and the speakers was infectious!
  My needs were met by the speaker sessions, and by personal discussion which I valued.
- To witness the strong support given by so many present for the work of Miss June Cochrane and College of Nursing Australia - this to me showed how much of the networking already done can be coordinated in the future
- Sharing of ideas
  Contact with other DE educators - national networking
  Viewing/discussing optional modes of DE delivery
  Gaining ideas re participants' needs and expectations about DE for nurses in Australia
- The spirit of sharing so readily
  The experiences of difficulties as well as successes

* The interaction of people from so many valued distance education centres and their attitude of cooperative sharing

* The contact person established learning 'how to' develop a program

* Gave me a framework to work within. Must comment on the quality of sharing, warmth of participants and standard of material presented - all excellent. I believe this was made possible by the conference organisers who did a great job

* Meeting such a diverse group of people who had been so willing to self disclose

* To discover present use of Distance Education in Nursing in Australia. To sense the eagerness to cooperate and share ideas and material cost. To expand one's horizons

* Awareness of the extent of DE in nursing education.
  The information obtained via workshops.
  The free sharing of ideas and resources, i.e. conference tapes

* Realisation of the number and variety of programs 'in action' externally

* All the sessions were relevant and most informative.
  The essential components of a team related to distance education and the function of each in the team was very good

* Listening formally and informally to people who were working in or concerned about quality of distance education

* Hearing what's being done to stimulate ideas about what could be done

* The papers delivered
  The informal contacts established
  The workshop discussions
  The technology demonstrations and examples of programs already developed

* Wonderful socialisation
  Wonderful SA REDS (particularly the Coonawarra's)
  Overwhelming enthusiasm to exchange knowledge
  Establishment of personal networks

D. Any other comment

* Nursing in DE still requires skills in producing DE materials. The workshop was a great way of sharing information but educators have only begun to examine DE as an alternative

* I regret that I was the only representative of psych nursing at the workshop. My field of nursing is sadly underdeveloped in its provision of continuing education.

* It was an excellent,well-organised fruitful conference

* The Workshop was excellent. I felt at home right from the start.

* Congratulations on a most successful workshop. I have come away enthused to get started on a program!

* Continue to plan further activities

* A wonderful learning experience

* A worthwhile venture. Participation in the workshop has helped me considerably

- An extremely stimulating and valuable experience

* A very useful first workshop on Distance Education in Nurse Education - further areas could push up specific issues in more detail (even preparing material!)

* I found the workshop invaluable for my work in preparing a distance education program for pre-school/Mothercraft Nurses, many problems have been resolved. And I have been given many further contacts in this work.

* This workshop has been and will be of enormous value to me back in the 'workplace'. Thank you very very much for all your hard work and thoughtfulness. Shalom

* Thanks for Mike, Rae and GIAE for organising the details with the planning committee
  Thank you Gippsland for a wonderful three days (and nights)
  Congratulations to everyone involved!

WORKSHOP REFLECTIONS

by John Fenwick, Victorian College of Agriculture and Horticulture

I found leading one of the workshops a rewarding experience in this strong, enthusiastic Special Interest Group of Nurse-Health Educators. The workshops brought together people of widely diverse backgrounds and needs making the experience both interesting and demanding. It was interesting to share in discussions that covered a wide field with so many different aspects; it was demanding in trying to unify and provide cohesion.

In many ways I found an immense feeling of empathy with the nursing discipline. Distance education in a discipline such as nursing has very similar aims, objectives and problems as does agriculture. Most of these challenges were aired in the workshops:

1 Integrating theory and practice

The objective of providing a theoretical base to match a nurse's clinical experience is difficult in a face to face mode let alone the off-campus mode. The different ways the nursing distance educator sought to meet those objectives was a challenge. The question of clinical teachers not being conversant with the distance education material was one problem. The question of mentors was discussed and examined.

2 Technical language

The medical language is difficult to grasp as a student. Being taught in a distance mode makes the job much more difficult. Several interesting ways of overcoming the problem were explained by Sue Warn of the Mayfield Centre. Her work on terminology, its origins and meaning is interesting and innovative. The use of glossaries in distance education units seems to be rare. The work of Anne Clyde *et al* at James Cook clearly shows students do not necessarily study the material in the way course writers and curriculum planners intended. Glossaries, indexes and tables of content are all ways of providing access.

3 Enabling knowledge

Romiszowski calls the knowledge needed to perform a task - 'enabling knowledge'. Trying to plan the curriculum to meet the demands of the clinical area, the anatomy and physiology and medical curriculum provides a real challenge to the distance educator. The holistic approach makes that challenge much more poignant.

4 Isolation

The needs of the bush nurse, in that ready and immediate access to a doctor is not always available, demands a course different from that suited to urban nurses. The isolation creates unique challenges for educators. Audio tapes, photographs of tutors, telephone and wireless lines all offer ways to meet the challenge.

5 Deep processing

Ways of encouraging and leading the student to deep process rather than surface process (rote learning, learning at a superficial level - to learn facts without thinking of how, when, why, where and what). The work of Martin and Saljo was discussed and 'dissected'. How can nurse educators move the student away from rote learning anatomy and physiology?

6 Choice of integration of media

One of my pet hobby horses was aired. The lack of integration of print media with graphics, audio or video continues to show through. The problem is the need to select media because it is the *best* media to teach a specific topic rather than because it is innovative, has an equipment funding grant or carries status.

7 Objectives

The whole question of aims and objectives came through again and again in the workshops. Distance educators need to carefully think through what the aims and objectives of units, assignments and readings are. What about these hidden objectives? Are notes written to help the student or to satisfy peers? These two can conflict.

In summary this was a series of workshops that many in other disciplines would have found rewarding. The commitment, openness and enthusiasm of the nurse and health educators was infectious and I left carrying an infection I was pleased to have caught. I learnt a lot and admire the way this group is forging the way in ASPESA for other disciplines to get to grips with distance education.

A REPORT ON THE 'DISTANCE EDUCATION IN NURSE EDUCATION' WORKSHOP

by Pamela V. Ryan, College of Nursing, Australia.

"A Workshop to Plan, Prepare and Improve Distance Education Materials, Methods and Delivery Systems" was what we were promised but we received a lot more! The informal contacts with workshop participants did as much towards establishing a national network of committed distance educators as did the planned formal program during the four days of the actual Workshop. With participants from every State in Australia, the scene was set for a national exploration of the issues of distance education for nurses and the outcome was exiting - a commitment by these people towards the provision of distance education for nurses in Australia.

As one of three persons comprising one team of workshop facilitators, I was provided with an extraordinary opportunity to discuss distance education issues with most participants as they circulated around the four mini-workshop groups. The most outstanding aspect of the group discussions was the open sharing that occurred during these workshop sessions. Participants appeared to be genuinely committed to the primary objective of exploring the benefits, limitations, realities and methods of providing education to nurses via external mode. The informal group atmosphere encouraged nurses to ask questions and to examine alternatives as they endeavoured to apply new information to their own situations.

Special recognition must be given to the people from general education who provided guidance on instructional methodologies and designs for distance education to nurses who often had little theoretical background or practical experience in this area. These generalists, who had limited personal knowledge of the discipline and teaching of nursing, ably demonstrated their capacity to apply gereral educational principles to the nursing field. As a group facilitator I was grateful for their contributions which enabled conversation to flow freely and major issues to emerge and be explored.

The leadership provided by nurses themselves was also impressive. In Australia today we have a handful of professional nurses who have taken the initiative to provide distance education for nurses via a variety of innovative and sometimes internationally-unique methods. At the Gippsland Workshop we were privileged to listen to the papers of many of these nurses and to discuss their professional experiences with them. The invaluable insights they provided served to reinforce the beliefs and aspirations of other nurses present and provided the impetus many of us needed to pursue our ideals in the area of distance education.

Many unresolved issues arose during the mini-workshops. For example:

. Where can funds be obtained for developing and providing distance education to nurses around Australia?

. Where are the existing distance education resources (both human and material) located in Australia and can nurses gain access to them.

. Is it possible to establish a collaborative approach to the development and distribution of distance education for nurses which will cross all boundaries imposed by geographical regions and political persuasions?

. How might we share distance education materials developed at one instituation with all other instituations in Australia without compromising ownership rights.

As a representative of the College of Nursing, Australia I was heartened by the call of nurses at the Workshop for the College to assume a major role in the provision of distance education for Australian nurses. Their recommendations that the College (a) become a national resource centre for the development and provision of distance education courses for nurses, and (b) investigate the use of new technologies in the provision of distance education nursing programs across Australia have been noted and I am pleased to advise that, since the Workshop in Gippsland, the College of Nursing, Australia has:

1. initiated discussions with the Family Medicine Program to explore the possibility of using their Viatel system in the provision of distance education for nurses;

2. developed a research proposal to, firstly, investigate funding sources for nursing projects which will include distance

education courses and, secondly, conduct a needs analysis in the area of continuing education for registered nurses in Australia; and

3. commenced collaborative planning with two nursing bodies wanting to convert existing courses to the distance education mode and with one organization wishing to provide an external gerontic course to country nurses.

It is true that the impact of the Distance Education Workshop held at Gippsland Institute in February will never be fully conveyed by the written word alone. However, it is reassuring to know that the information which was shared and the liasons which were established have already borne fruit. As a result of this Workshop we are one step closer to an exciting new era in the provision of education for nurses via distance mode.

DISTANCE EDUCATION IN NURSE EDUCATION WORKSHOP

A PERSONAL REFLECTION

by Daryl Nation, Gippsland Institute

INTRODUCTION

This is a brief personal reflection upon an invigorating educational experience. It is a selective discussion which concentrates on the earlier sections of the workshop. It has been written by an enthusiast for distance education with thirteen years experience teaching sociology to external students, four years experience of research in distance education, and next to no experience teaching nursing students.

HARD TIMES

As Geoffrey Bolton (1986) has argued so eloquently, distance education was conceived in adversity, reared in poverty and spent its early adulthood in the prosperity and cultural surge of the post-sixties. As it enters middle-age it has moved into a mid-life crisis as it finds itself perched upon the brink of a new adversity. Professor Richard Johnson's address to the workshop was given against the backdrop of the new adversity.

Nursing education enters the arena of distance education just as efficiency and effectiveness have become the watch-words of the funding authorities. The Commonwealth Tertiary Education Commission (CTEC) will not allow the proliferation of nursing courses for external students. This will mean cooperation and collaboration (two more watch-words) between the distance education providers of nursing studies. The College of Nursing Australia, the Australian Conference of Directors and Principals of Colleges (ACDP) and many of the colleges have discussed plans for cooperative ventures in nursing education.

By stressing the need for economies of scale and cost-benefits, Professor Johnson brings the logic of "industrialism" into distance education. This model assumes large numbers of students - at least 3,000 students in an individual college and preferably about 200 enrolments in any single unit of a course. These students would be taught with course materials which are produced in designated centres in a cost effective manner.

BEYOND EDUCATIONAL TECHNOLOGY

In the late seventies enthusiasts for gee-whizz technology were proposing a new high-tech era for distance education: satellites, computers and the like would create techno-universities. Peter Smith's address suggested that this was never realistic. Technological changes have had major impacts on distance education; regard for example, the impact of the penny-post and off-set printing. It is the harnessing of technology which is important.

Current educational technologies, Smith argued, should allow us to develop systems of open learning in which there can be a convergence between conventional and distance education. He recognises we need to go beyond technology. But, to where? Nunan (1983), Forster, King and Luke (1985) and Evans and Nation (1987) provide some useful pointers. The challenge is not to accept educational technologies but to adapt them to suit particular needs and, above all, to develop educational strategies which maintain dialogue between learners and teachers. A package of teaching materials is not a course!

TWO SETS OF EXPERIENCE

On Tuesday morning we had the opportunity to hear about two sets of experience relating to the teaching of nursing studies through distance education. John Dekkers gave an overview of developments at Capricornia Institute of Advanced Education (CIAE) and Jane Shoebridge, Elizabeth Sneddon, Anne Lloyd, Helen Connole and Pat Flynn shared with us their experiences at South Australian College of Advanced Education (SACAE). Arguably, these approaches can be regarded as representative of two alternative futures for distance education in nursing studies. Further exploration of each of them is very necessary and a comparison of them is essential.

Instructional Industrialism

John Dekker's approach is founded upon Robert Gagne's instructional model, which has its bases in behavioural educational psychology. The model emphasises "students' activity" and going beyond passive learning experiences like lectures. Yet its instructional texts assume that all learners can proceed through the same set of steps towards a set of well defined objectives. This approach assumes that in-text questions and "instructional activities" guarantee student engagement.

The CIAE model is based upon teamwork. The teams include the writer (a nurse educator), an instructional designer and an editor. A learning model and a production-style is imposed upon the writers' content. The model seems to emphasise materials production.

Little was said about the relationships which are fostered/assumed between the course writers, tutors and students. This approach accords with what many would regard as conventional-wisdom in educational development.

Dialogue at a Distance

The SACAE presenters put great emphasis upon teamwork, dialogue with students, catering for perceived local needs and, above all, producing a style of teaching which accords with local needs and available resources. Their approach was heavily influenced by humanistic theories of teaching and learning taken from psychology, sociology and feminist theory and practice. Indeed, their whole approach really boiled down to: these were the educational problems we faced and this is how we solved them. Distance education became the obvious means of solving a perceived problem.

Central to their approach is fostering dialogue between students and staff. This is established through short residential schools, an appropriate style of discourse in the course materials and a client-centred student counselling service.

FACING THE CHALLENGES AHEAD

THE CIAE and SACAE approaches to distance education in nursing studies can be seen as two contrasting models. The former fits within the dominant instructional design paradigm and the latter within humanistic perspectives which are now coming together to challenge this dominant paradigm. (Evans and Nation, 1987) While I will continue to advocate this latter approach, as a pragmatist, I must concede that the instructional design approach will persist, although there must be real hope of major modifications being achieved. Realistically, we must allow both approaches chances to show their strengths and weaknesses.

On the surface the instructional design approach would **appear** to be more appealing to those interested in efficiency and effectiveness. Centrally produced materials designed by experts in their fields can be made available to large numbers of students. Many who advance these views speak in terms of the Open University of the United Kingdom (OUUK); they conveniently (perhaps ignorantly) forget that the OUUK also has another important dimension to its educational services - a regional tutorial system (see Sewart, 1983). In a sense the OUUK can be seen as spanning the two paradigms referred to above. Here lies the central lesson for those exploring nursing studies at a distance in Australia - the need to build a system which preserves the possibility of teams of experts getting together to develop courses and associated materials, which can then be produced using economies of scale and, more importantly, then used by tutors and students in local contexts.

We should use the SACAE principles to develop practices which will allow for a diversity of views regarding content and teaching. When courses and materials are developed and produced this way, by **teams** from cooperating institutions, they are likely to be of real use to students and tutors at local-level.

There are demonstrable benefits for students and their teachers in the harnessing of educational technologies which require economies of scale. The products of these technological processes - the course materials - will only be used effectively by teachers and students who feel they have some involvement in their development.

REFERENCES

Boulton, G. "The opportunities of distance" *Distance Education* 7,1, March, 1986. pp 5 - 22.

Evans, T.D. and Nation, D.E. "Which future for distance education?" A paper presented to the 56th ANZAAS Congress, Palmerston North, New Zealand, January, 1987. Published in *International Council for Distance Education Bulletin.*

Nunan, T. *"Countering Educational Design London'* : Croom Helm. 1983

Sewart, D. "Distance Education: A Contradiction in Terms?" in Sewart, D., Keegan, D. and Holmberg, B. eds. Distance Education: International Perspectives, London: Croom Helm, 1983

REFLECTIONS OF SOMEONE WHO ISN'T A NURSE

by Jo Osborne,
Instructional Designer
Tasmanian State Institute of Technology

The last flight to Tasmania left to early, so I had to depart before the concluding session and offer my own impressions accumulated throughout the Workshop.

As an Instructional Designer, nurse education is only one of the areas I work in. I am therefore no 'expert' at the subject and talking to people who are, was a valuable experience for me. Participating in the Workshop, and especially leading one of the groups, gave me the opportunity to gain further insight into current concerns of nursing lecturers, particularly where distance education is concerned. I must say, as someone who has worked on the development and production of distance education materials for a number of years, it was heartwarming to see so many participants at this Workshop eager to discover and share ideas about a mode that is relatively new to most. Michael Parer had done a very good job with organising the group sessions. The handout sheets provided a very full basis for discussion, and none of the sessions went anywhere near to exhausting the possibilities. However the sheets provided participants with outline notes which fill some of the gaps.

As one pair of group leaders, Daryl Nation and I guided participants in discussion topics suggested by the handout sheets. Each discussion group consisted of members who had some experience of distance education (both as teachers and as learners) and members who were approaching the medium for the first time. By drawing on the experiences of others, therefore, we were able to make comparisons and identify potential problems and possible solutions. Inevitably discussion sometimes strayed from the strict topic in hand, but when this involved the majority of the group in active discussion of a common area of concern, this must have been beneficial in its own right! It was so interesting to hear the different experiences of professionals engaged in nursing education under such a wide range of circumstances. Here are some of my main recollections of workshop discussions:

I was particularly impressed by the hard work that must have been put in by writers of external studies materials who, as lecturers primarily in the health professions, had to learn by experience the best way to go about the task. (Instructional Designers are resource people who can help in this area.) Workshop participants about to embark on writing distance materials decided they needed to find out what resources and resource people might be available to them.

Various non-print media were briefly discussed particularly audio-tapes, as they are cheap and relatively easy to produce and use. However differing experiences of group members, who had used tapes themselves as students, illustrated the need to make tapes interesting and to use a tone and style appropriate to the audience. It is all too easy to produce a bad tape which alienates students and loses their interest.

The 'Clinical Teaching' unit produced at the Warrnambool IAE engendered a great deal of interest, and most of this discussion comprised an intense cross-questioning of Lorraine Kelly by all group members. General consensus was that the WIAE materials were well constructed and most useful, with considerable potential for adaptation for the training of clinical teachers in other States.

Whilst distance education for clinical teachers was a well recognised need, opinions differed widely as regards clinical training for nursing students at a distance. Some participants believed that, at a basic level, the external mode is not appropriate. Another view expressed was that nurses engaged in post-graduate clinical studies did not need clinical teachers in the hospitals. Opinions seemed to be firmly held, and it was a pity there was no time to discuss these views further.

Unfortunately, I had to depart in the middle of this session. Again, questions were directed at individuals with some experience of running a distance education program by those for whom the daunting task loomed ahead. I think, by this time in the Workshop, everyone had accumulated a long list of Things To Do and Find Out. Before I left, I wanted to have my say, which I did by outlining a list of things I felt educators needed to be aware of, and prepare for, before launching a distance program, and some of the things that often seemed to go wrong. I wanted to emphasise that to make things run smoothly, some good spadework needs to be done. Systems tend to grow to cope with problems that have occurred and this can result in a mixture of "bandaid" measures. If you plan a system ahead - building in some flexibility - and try it out with a small test-run first, I think a better system will result.

STUDENT'S EXPERIENCE OF EXTERNAL STUDY AT GIPPSLAND INSTITUTE

Introduction

This report was prepared by Dr Michael Parer Head of the Educational Development and Research Unit with Alister Morgan as consultant, and Gina De Bolfo and Robyn Benson as Research Assistants.

How do external students come to be taking courses at Gippsland? What do they hope to gain from external study? At a more detailed level, how do students handle particular study guides and assignment materials? what is the nature of the social context in which external study occurs? At the general level - what is it 'really like' to undertake external study with Gippsland Institute of Advanced Education (GIAE) - How do students experience study when it is viewed from their perspective?

The present study is an attempt to address these questions through the method of student self-report study diaries. This method of a diary recording of experiences of studying can be described as broadly within a qualitative approach to research and evaluation.

The is a considerable body of literature on research and evaluation in education which attempts to describe learning in a natural setting. For example:

Entwistle and Hounsell (1979) identified a trend in research in student learning towards qualitative methodologies so as to increase the relevance of the findings for practising teachers.

Similarly, Wilson (1977) and Filstead (1979) argue for an ethnographic or qualitative approach to research and evaluation in education so that the complexity of the student and his or her ability to reflect upon experience are recognised. This is in contrast to traditional evaluation and mechanistic models of learning which ignore the conscious control of the learners over their strategies and approaches to studying.

A study diary provides one possible way to describe students' experiences of external study.

This study was undertaken in three phases, and the results of each of them are included in this report.

The first was a 'Pilot' phase with 12 students participating and was reported in the student newspaper 'COMMUNIQUE' in July 1983.

The second phase selected one hundred and one students from four units, of whom forty-eight participated. A preliminary report was given at the Higher Education Research and Development Association of Australasia in May 1984.

The third phase was the interviewing of three of the participating students, and writing their study experience as case studies.

Phase One

In the second semester of 1982 students were invited to participate in a project to look at various aspects of external studies and, in particular, the study methods used by students. Twelve students offered, and were given a diary to fill in over a thirty day period. The students were from a variety of areas and were all external students. They were supplied with an A5 desk diary and were given a fairly open brief on how and what to record.

The students who participated filled them in with varying degrees of detail and were then analysed by the Educational Development and Research Unit. To assist in the data analysis interpretation and possible future directions, assistance was sought from Dr Alistair Morgan, a lecturer in Educational Technology and Head of the Study Methods Group at the Open University in the United Kingdom.

The project was important, as GIAE is a major provider in Distance Education, so designated by the Victorian Post Secondary Education Commission (VPSEC), with a future role to offer courses externally not only in the Latrobe Valley region but to students throughout Victoria.

The project was also important to discover the special needs of our students,both for the course design, the administration of the external studies system, and to enhance the teaching and learning process.

A key feature of any qualitative method is that students' responses are not pre-coded from the teachers' or researchers' perspectives and the analysis is not derived from pre-specified hypotheses - the analysis is essentially inductive, uncovering 'significant phenomena' or 'essence' in a student's experience.

Glaser and Strauss (1976) describe the advantages of this approach:

> "The consequence of the traditional approach is often a forcing of data, as well as a neglect of relevant concepts and hypotheses to emerge. This enables the analyst to ascertain which, if any existing formal theory may help him generate his substantive theories."

The analysis carried out on these GIAE student diaries consisted broadly of four rather different levels:

(i) reading each diary to gain familiarity with the content;

(ii) simplifying what each student recorded, or getting at the 'essence'; shortening the diary, but without losing the meaning;

(iii) comparing and contrasting what each student recorded - identifying variations and common themes in the diaries;

(iv) describing the variations between students, and relating their experiences to other concepts and theories of how students learn, and using quotations from the diaries to illustrate and highlight students' experiences.

Obviously, with a sample of twelve students, any conclusion must be cautious. This type of qualitative case study research provides a generalisability in the sense that these experiential summaries can provide a relevance to the reader or users of the findings. This type of research aims to raise people's awareness of activities and events in a particular setting so that links and parallels can be drawn to inform practice in other settings and new contexts.

Students' Experience of External Studies

An overwhelming impression gained from many of the diaries was the crucial impact of students' social and domestic contexts on their study. There were numerous references to problems of 'getting down to it' and difficulties of almost continuous family and domestic interruptions. A typical example is:

> "I tried to read the tutor's comments on my assignment but gave up - kids too insistent on my attention".

The basic problem of 'time management' was quite a common theme in students' records:

> "At one time I just studied at night when everyone was asleep, but sometimes the older ones are awake and still up when I'm ready to start - still my plan was one and a half to two hours at night. One needs to stick to it, but I don't know how - being flexible is a big plus for most 'committed elsewhere' people and I just don't want to lose that - I'm just sick of being over-flexible."

Besides domestic organisational issues, there was one instance of hostility from a student's children. They were complaining about the time their mother spent studying - 'you always say you have to study!'.

Without wanting to underestimate the problem of finding time for studying, some of the difficulties of 'getting started' and 'getting going' on assignments seemed to be related to whether students knew what was expected of them. There were many dairy entries of students not knowing what to do for assignments.

One student diary described an assignment like this:

> "Colonialism and Neo-colonialism - Australia and Latin-America - A Comparison: What basis, what country, what aspect - getting frustrated - don't know how to tackle the assignment - stuck again . . . This is always the worst time - getting off the ground and deciding the line of attack."

The process of 'sussing out' the system and gaining a feel for what is required is assignments can be a difficult and slow process, especially in off-campus study, where the immediate student peer group is absent. The absence or difficulty of interaction means that problems cannot be addressed and students can remain 'stuck' for considerable periods of time.

Here is one student's comment after a weekend lecture/tutorial session, where there is opportunity for face-to-face exchanges with a lecturer and other students:

> "The lecture-seminar was very helpful, for the outline of an assignment was given . . . a great pity this outline was not given earlier. I really missed contact with the lecturer and other students if only to 'let off steam' and discuss progress. External study is never knowing where you've gone wrong until you get your assignment back - sometimes months later."

Another example was from a psychology student:

> "I feel very tired and depressed - still feel the whole thing, the assignment, was a mess - it was so difficult to know what was required. It would be such a help to see what other students were submitting and the sorts of grades they got . . . we have been given a model report to follow but I found the references for this topic all conflict and I found it very hard to work anything out."

The major impact of the nature and style of the assessment system in influencing students' experience of study has been well documented on many settings, see, for example, Rowntree (1977). Arrangements to facilitate more dialogue between students and tutor, non-assessed outlines of assignments, two-stage assignments and telephone tuition are areas that could usefully be built into the GIAE course design.

Some students found an ambiguity and lack of clarity in the setting out of assignments. There appeared a breakdown in clear communication from the lecturer and consequently the lack of confidence and 'fear of failure' came over as a theme in the diaries:

> "The assignment is due next week . . . I'm slowly gaining an understanding of the topic, though not well enough to more than paraphrase what is in the text . . . for a nurse and mother of small children, the switch from the practical world to the abstract one of study is difficult . . . I feel anxiety about the exam and probable inability to obtain a pass on this assignment."

Some of the diary entries about problems of getting started and the difficulties of interruptions could be described as "disorganised study habits". Helping these students might be seen as offered guidance on 'finding the best time to work' or 'working to set schedules' - essentially mechanistic and prescriptive views of how to study. This type of guidance misses more fundamental issues concerning what students are trying to do in their studies and how they are going about them. There was clear evidence in the diaries that some students are attempting to 'reproduce the information' in their attempts at study. The task is seen as essentially one of remembering. Confusion and difficulty with study arises immediately because of the volume of information presented and assignments which are not merely aimed at this low-level task.

> "I find sociology difficult - I'm not familiar with the special language. I doubt I will be able to recall much or express myself without the text books."

Other diary records suggested that some students were taking 'surface approaches' to their studies.

The importance of the distinction of deep and surface approaches to study was identified by Marton and Saljo (1976). The approach to study was functionally related to the content and quality of the learning outcomes of what students gained when asked to read academic articles. Two qualitatively different approaches to study were identified; a surface approach, where students attempted to memorise and reproduce the information, and a deep approach, where students were trying to understand the overall meaning and message. Students who took a deep approach gained a full understanding of the articles, in contrast to those who took a surface approach and failed to understand the articles. Similar variations in approach to study have also been identified with students studying at a distance with the Open University in Britain (Morgan, Gibbs and Taylor, 1982). In this context, helping students is concerned with raising their awareness of how and why they tackle study in a particular way in order to assist their development as learners. This views of study skills focuses on the overall process of study skills and the quality of learning outcomes as a 'skilled performance' rather than on prescriptive techniques or methods, see, for example, Marton F and Stevenson L (1982) and Gibbs (1981).

Although the student quoted above was clearly taking a surface approach in relation to the task of reading and writing, in other contexts learning was perceived in a very different way. One found that discussing social science ideas with her husband helped her studying:

> "I'd just read Dinkhiem - he quizzed me on the subject and I had to explain what it meant - maybe husbands can be useful in the study programme, I'll see if I can involve him more."

Although this opportunity for learning through discussion was not formally organised by GIAE, the experience helped this student go beyond the 'information given' and develop her own construct system by having to explain it to someone else.

The value of learning through discussion was recognised by other students in the organised weekend tutorial sessions. The seminar groups were seen as enjoyable and at times far more useful than the conventional lecture.

The problems of getting formation and finding out what is required has already been highlighted in relation to the graded assignments. The same applies even more so to examination requirements. Descriptions of frustration and disgust came over in one diary where details of changes in the examination had apparently only been notified at a vacation school which this student had been unable to attend. It was almost as if the 'rules of the game' were being changed after the game had actually commenced!

Another aspect of students' experience of study that could be discerned in some diaries was their orientation to learning. Orientation to learning is defined as 'all those attitudes and aims which express the students' individual relationship with a course of study and the University", (Taylor, Morgan and Gibbs, 1981). Motivation is often used to describe variations in students' capabilities for study, however, rather than being more or less motivated, students are oriented to qualitatively different things in their studies.

The main distinctions in orientations to learning are academic, personal and vocational. The concept of orientation helps to interpret some of the diary data and understand better how a student is studying.

Here is an example:

> "My problem is that I'm not sufficiently motivated - this study is just one of my activities - no job prospect or promotion depends on it - as such it's probably useless - but having got this far I might as well finish I suppose."

There is clearly little interest in the course itself, although a qualification or credit seems to be desired, essentially a personal extrinsic orientation.

Conclusions

Although the diaries contained a large amount of information, much of it did not provide particularly powerful insights into how students were tackling their studies. Entries such as

> 4 - 6pm - read books and worked on assignment - drank coffee"

did not tell what a student was trying to do during the study period. In spite of this, the experiences of learning described above seemed 'significant phenomena' to this first enquiry and could feed in to discussions on course development. This type of research could raise academics' awareness of what external study is like from the students' reality.

Areas for Future Research and Evaluation

The open-ended diaries used in 1982 generated rather mechanistic responses from many students, partly because of the format of the pages, with hour to hour sessions, and also through the lack of specificity on how to respond. The diaries do not seem to have encouraged students to be particularly reflective about their studies.

This project continued to a next phase when the diaries were tailored to special questions such as: Describe activities in your studies which have helped and assisted your learning activities and experiences, and those which have hindered or frustrated your learning.

The second phase was planned to look into the concept of orientation to learning, approaches to study and the conception of learning which seems useful to understand student learning.

Phase Two

Methodology

Diaries were sent to students taking the following courses in 1984 - Introduction to Economics, Introduction to Psychology, Introduction to Sociology and Electrical Machines. Students were selected at random and 101 diaries were mailed to students. With reminder letters during the study period, just over 50 percent of the diaries were returned.

The courses chosen for this study arose through discussions with faculty staff who had expressed an interest in finding out more about external students.

The diaries covered the first 'study guide' of each course - approximately one months work, comprising set readings, specially prepared study guides, a weekend school and submission of an assignment. The diaries were based on an A5 format desk diary; students were asked to reflect on their studies - to record issues which had assisted or progressed their work - issues which had frustrated or impeded study. Also they were asked:

> "How do you come to be taking this course - what do you hope to gain from study with the GIAE?"

Obviously the returned diaries were varied in the detail and quality of the recordings. However, twenty nine diaries contained detailed information which provided insights into how and why students were studying.

Although the analysis of the diaries was carried out by reading and re-reading students' reporting, this analysis was informed by the theoretical framework of research into student learning which attempts to describe students' realities of learning (see Marton F, Entwistle N, and Hounsell D (eds) 1984 "The Experience of Learning').

As noted earlier, with a small sample and low response rate, there is not claim for statistical generalisability. However, this type of research provides a generalisability in the sense that these experiential summaries can raise awareness to issues and improve practice in other settings.

This analysis of the diaries revealed a number of key issues or theoretical concepts: students' orientations to study, their conception of learning and approach to study, the social context of external study, how aspects of course design and assessment influence learning, and systemic and organisational aspects of external study and GIAE. These key issues will be described and then a small number of case studies of individual students will be presented to highlight the major points.

Students' Orientations to Study

Orientation to study is the collection of attitudes, aims and purposes that express a student's relationship with a course of study and the institution or college (Taylor, Morgan and Gibbs, 1981). Orientation to study forms the broad background personal context which will influence how students will tackle a particular learning task. Motivation is often used to explain variations in students' apparent capabilities in their studies. However, from students' perspectives, they are not more or less motivated but oriented to qualitatively different aspects of studying.

With Open University students, three main types of orientation have been identified: vocational, academic and personal, each with sub-categories of intrinsic and extrinsic. These categories of orientation prove to be robust concepts for making sense of how external students come to be studying at GIAE.

Vocational Orientation

Vocational reasons for undertaking external study are probably the most frequently mentioned amongst academic staff, when talking about external students. Many students can be described as having vocational orientations. The distribution between an intrinsic and extrinsic vocational orientation was clearly visible in the student diaries. The intrinsic orientation relates to following a career, developing and updating previous qualifications for newly emerging career interests.

In contrast, a vocational extrinsic orientation describes students who want the qualification for the specific goal of gaining employment. In one case the goal was described as purely a financial incentive in order to meet consumer aspirations:

> "I want my qualification badly enough to battle through almost any obstacle . . . I want my qualification so I can earn some money just as an emergency teacher. Geoff earns enough for us to get by - all our basic needs are met. I don't feel I need to work to get out of the house - I take my role as mother and housekeeper pretty seriously. I just want a bit of extra money so I don't have to say no to myself so often - by nature I'm extravagant."

Academic Orientation

The traditional aims of higher education - scholarship, learning and research are reflected in academic orientations. An extrinsic academic orientation describes a student who is concerned with progression up the academic ladder. For example, students who continue subjects in which they gained good grades at school - they almost drifted into higher education because that was expected of them. In contrast, an academic intrinsic orientation reflects students' interest in the content, an intellectual interest in the subject matter for its own sake.

With the external students in this study, there were very few instances of academic orientations. This is particularly interesting in alerting faculty teaching staff to what external students 'are really like', when their own orientations as students were probably primarily academic ones.

Descriptions of students' orientations to study are idealised cases. In practice, a student's description of how he or she came to be studying will be a more complex mix of various types of orientation.

Orientation to study provides an holistic description of motivation, and enables us to understand more about what a student is doing when confronted with a specific assignment or learning task.

Personal Orientation

Personal orientations to study describe very different aims and aspirations of external study. Some students are primarily focused towards personal development and change. This intrinsic orientation was particularly widespread with women students who wanted to develop beyond their traditional roles in the family.

For example:

> "I want to get my BA not for economic reasons, I want to expand my own store of knowledge and open my mind to new ideas. Do something for me for a change, to continue to grow and develop."

Another student expressed it thus:

> "Since studying with GIAE I have learnt so much and discovered a new appreciation of literature and history that has enriched by life - there is no monetary gain in achieving a degree - to me the gain will be in keeping alert, interested and aware of the modern world."

Besides the orientation towards personal growth and development, there were instances of a more extrinsic orientation - students want to prove their capability for post-secondary education after leaving high school at an early age.

> "There is the pride I feel when I can tell people that I hope one day to have a business degree, when I though I would never amount to anything more than a housewife or perhaps a clerk."

Students' Development as Learners and Approaches to Study

How do students change and develop as a result of their college experiences? How did students describe their work from the study guides and in attempting the assignments? Perry (1970) at Harvard University interviewed students during each year of their undergraduate studies. He described how students developed their epistemological framework. Initially students held absolutist conceptions of knowledge, where the teacher was perceived as the authority figure, and the students' task was to learn the 'right answers' provided by the teacher. Subsequently, students developed to more relativistic conceptions of knowledge, where competing or conflicting theories of explanation must be examined in context and for their coherence or explanation of data. Finally, Perry identified some students who developed a personal commitment to a particular position within this relativistic conception of knowledge.

Saljo (1979) investigated students' conceptions of learning by asking them:

> "What do you actually mean by learning?"

He identified five distinct conceptions. Conception 1, 2, and 3 are concerned with learning as an accumulation of information, the memorisation of facts and learning set procedures or algorithms to be used in practice. In contrast, conceptions 4 and 5 describe learning as "the abstraction of meaning" and as "an interpretive process aimed at understanding some aspect of reality". The major distinction in conceptions of learning is how in conceptions 1, 2 and 3 learning is a taken-for-granted, passive event with the emphasis on reproducing information. On the other hand, conceptions 4 and 5 describe learning as an active process, where knowledge is constructed by the learner.

This theoretical basis provides a way to interpret some students' diary entries. There were many recordings about attempts to reproduce information - for example:

> "I'm having trouble reading for meaning - I tend to cover pages and pages and retain very little - my solution is to read important parts on to tape and I play this while I'm working in the kitchen, cooking, preparing meals, etc."

Even after completing an assignment, there seemed to be emphasis on memorisation -

> "There are parts of the course I find I am forgetting, so there will be a need to repeat much of the assignment work after it is finished."

Students' development as learners appears to have a limiting influence on their approach to study and constrains them to adopt surface-approaches to study, i.e. they focus attention on reproducing and memorising information. This is in contrast to taking a deep-approach, where the intention is to gain understanding, and go beyond the information given and focus on constructing meaning (Marton and Saljo, 1976).

There were suggestions of a deep-approach to study in some diaries. A sociology student described an evening's study session of about two hours as follows -

> "Some reading - perhaps more reflection than reading tonight. I enjoy reflection and find my real learning and understand is achieved this way. However the reading is the basis and essential starting point."

Besides students' development, aspects of course design and assessment will have an important influence on how they tackle their studies.

Course Design and Assessment

Aspects of assessment make a crucial impact upon students' experiences of learning. As Rowntree (1977) stressed 'the spirit and style of student assessment defines the de facto curriculum'.

Although a major impression from the diaries was the impact of students' social and domestic contexts of study - problems of 'getting down to it', almost continuous family interruptions, etc. - there were numerous references in diaries to 'finding what to do for assignments' - sussing out the system to establish what is really required.

Getting going for new students to external study also seems to have an emotional aspect - partly associated with lack of confidence.

> "Things I'd like to see changed - greater introductory lecture and tutorial coverage to 'break-in' new external students . . . the 'darkness' becomes your closest friend when studying alone - no matter how much assistance is set out it's difficult to specifically name problems to overcome. Just to have someone there to let you know if you are working on the correct lines."

Wondering what to do for an assignment described in more concrete terms as follows:

> "Read the books for sociology assignment - tried to precis Williams (text book) but couldn't get it down to 500 words. Decided it was the wrong approach. Am hoping that 'prose paraphrase' means giving a personal opinion of what is important in what he is saying."

The role and importance of statistics in the psychology course was questioned thus -

> "Can't work out with statistics whether you're supposed to follow the reasoning behind these formulae, or remember them, or simply know where to find them and use them if you need to."

The process of sussing-out the system and gaining a feel for what is required in assignments can be a difficult and slow process, especially for external students where the immediate student peer group is absent.

There are important variations in how students can relate to assignments as a focus for their study. Assignment-consciousness or cue-consciousness is a clear theme throughout the diaries. On one hand, some students seem aware that assignments place demands which will influence what is studied.

Some study patterns could be described as assignment blind. For example:

> "Tried to do some of the psychology assignment - but didn't make a lot of sense of it. Discovered I concentrated too much on what seemed to be the main emphasis of study for this month and only glossed over what turned out to be the basis for the first assignment - back to square one. It's taken me two hours to prove that I know virtually nothing and am on the wrong track."

There could hardly be a greater contrast to the strategic, confident engineering student, currently unemployed, taking five units by external study. The schedules and content of the assessment are the primary focus of study.

> "I want schedules - I'll have to pump out one assignment per week for the first semester."

Another interesting aspect of assessment-conscious students concerns those who know the system and have the confidence to telephone the teaching staff at the Institute. The unwritten code or 'hidden curriculum' is that help and assistance with assignments can be gained in this way.

The scope for dialogue and feedback was an important theme, under the broad area of aspects of course design. The isolation of students receiving grades on assignments, again touches on emotional and confidence issues of external study.

> "Just received my first assignment - a D! I've never had such a low mark - it was a hasty piece of work, perhaps I deserved it I feel very discouraged. The only bright spot is that the marker thinks I can do better."

The turn round time on assignments was vividly highlighted after a student had just completed and submitted an assignment.

> "Hope we get the result back quickly with plenty of comments - I've always found with external studies the time lag between sending in assignments and their return very frustrating, and usually you make the same mistakes in the next assignment."

Teaching and learning in weekend schools were frequently referred to in students' diaries. There were numerous entries about the size of groups at the weekend schools. Students were not wanting more lectures because this extraordinary component of being a student is infrequent for external students. Rather students wanted small group discussions, tutorials and facilities for dialogue about aspects of their learning.

> "The first weekend school - not very productive, an extremely large group, unmanageable for discussion . . . there was a general dissatisfaction expressed by students as to the content and format. It seems best to skip these sessions (they do clash with other units in my case) and form local study groups instead."

On the positive side, however, some lecturers at weekend schools were seen by students as stimulating interest and relevance. This aspect of weekend schools seems to be particularly important for students primarily wanting a qualification from external study (a vocational extrinsic orientation to study described earlier). A good lecture served to generate a vicarious experience of relevance and interest in the subject, as a way to get through the next requirement of the course.

Finally, for some students, the demands of external study came as a surprise with the abstract nature of academic study and the requirements of regular pacing and submission of assignments. One sociology student, with primarily a personal intrinsic orientation to study commented -

> "Maybe I was very innocent, but I though external part-time study would be done at a leisurely pace without the pressure of the full-time students. Instead I find the pressure greater than when I was last a full-time student."

Many students describe similar experiences in their diaries. It seems that we should regularly re-examine the admission counselling available and the basic information provided to new students.

The Social Context of External Study

Besides rather different teaching and learning methods of external study compared to on-campus students, the social context of study is extremely different.

Almost all the diaries made reference to 'finding time' for study in the face of competing work, domestic and social commitments. On one hand this could be labelled as problems of time management, however this misses more fundamental issues. The diaries show clearly a very traditional gender division of labour within the family.

For women students, especially, external study demands some reconstruction of the social structure within the family and domestic setting. Established patterns will require re-examination.

> "The reason I have to squeeze study in during the day is because I don't like studying while my husband is sitting all alone watching television, so any nights he has to go out are a real bonus."

Many of the women students referred to similar experiences - almost having to study in secret and at the same time be engaged in household domestic labour.

Even after a number of years of external study, women students felt an impression of resentment from husband and children. Changing aspirations will demand a change from others members of the household group.

> "Despite the difficulties, I'm glad I'm studying - it's nice to feel like a person again not just a mother - I like being a mother, but it's just not enough."

A supportive social context, besides enabling re-negotiation of roles with the family often provided students with their own self-help or study group. Informal discussions about assignment questions or what had been learnt helped to overcome the relatively small amount of dialogue between teacher and student, experienced by external students.

Phase Three

We sought, through the case studies of three individual students who filled in diaries, to bring the above concept to life and provide more details on educational background and social context. Their names have been changed to provide anonymity.

Student Diary Project

Student Number One

Pam is a housewife in her early thirties. She has one pre-school child and two older children. She left school at fifteen, married eighteen months later -

> "and then spend 12 years caring for children before feeling the need to do something else just for myself."

She thus brings an intrinsic personal orientation to her studies, although extrinsic personal motivation is also evidenced when she refers to -

> "the pride I feel when I call tell people that I hope one day to have a business degree, when I though that I would never amount to anything more than a housewife or perhaps a clerk."

There is evidence also of intrinsic and extrinsic academic motivation, although the primary orientation to study is personal.

> "Bookkeeping and Maths are two things that I get a lot of pleasure from - making sense out of numbers, gleaning hidden information from them. I got an 'A' pass for Corporate Accounting last year and I was thrilled to bits."

Her comments about learning as memorising suggest that she uses a surface approach -

> "If I can't work through something and then remember it, it's been wasted . . . that's why I try to spend a lot of time on it right through the semester rather than cramming at the end - to try and get a better understanding because it's going to take a long time for me to get this degree and if that's the pattern I'm going to forget the earlier units that I've learnt by the time I get to the end. So I'm determined to get a better understanding of it all - to be able to remember it."

However, her confidence in bookkeeping and maths reflects an unacknowledged awareness that 'understanding' involves more than memorisation. She refers to a Study Guide which contained a number of errors and states that she -

> "ended up going right through it, and crossing out most of it, and changing it to the correct answers because . . . I had a fairly good understanding of it so it wasn't a real problem to me but my friend didn't, so I gave it to her changed and said - 'now work through it. That's done properly, now you'll understand it a bit better'."

A surface approach may be more likely when the learning task is unfamiliar. Pam left school early and -

> "never really had any instruction on putting my thoughts down on paper."

Hence she states that her approach depends on the unit -

> Accounting is mostly maths work, practical work. I don't have any troubles with that. I enjoy doing it. But with the other ones, where there's a lot of thinking, a lot of reading, and I've got to try and put my thoughts down on paper, they're entirely different."

She attempts to be systematic in her approach

> "I have to think about what question has to be answered and break it down into a number of questions and sort of pinpoint the answer to each one as best I can."

But in searching for the answers she uses a surface approach -

> "I can read a novel for hours on end and I can remember what happened on the first page, but to read something like Galbraith, I can't remember the last sentence and it's most frustrating."

She uses the grades she has gained as indicators of whether appropriate learning has occurred, but suffers from lack of verbal feedback and is different about approaching lecturers -

> "When I got a 'B' I felt like going to the lecturer and saying 'what did I do right?' because I was very surprised to get the 'B', but then there were so many other people who seemed to want to talk to the lecturer at the time, that I felt it was unfair of me to be looking for things, when I got a good mark and I was thinking then that maybe that's the way to work on it - to try to do the plan first - to pick out all the questions in the original question and work on each separately. If i try to use that sort of plan as a basis for the next one, and I do well at that, then I know that I'm on the right track."

Thus lack of confidence in approaching lecturers due to -

> "my own inadequacy I suppose - insecurity - worry about approaching 'demigods' ", and fear of "being made to seem stupid."

She does not have some positive social and intellectual support in her studies from a friend enrolled in the same unit, and he values discussions which can lead to -

> "a clearer understanding for both of us" and "alleviate the feelings of isolation connected with being an external student".

While some assistance is provided through this relationship, the problems associated with unfamiliar learning tasks, a difficult study situation, and lack of confidence, suggest the need for plentiful lecturer support through well organised study materials, verbal as well as grade assessment, and lecturer/student contact where possible. Good grades appear particularly important in building confidence, but unless they are explained, their assistance in facilitating learning may be minimal -

> "I was wishing there were written comments - letting me know which points had been covered well and which hadn't. Obviously there were some things that I was missing out on, otherwise I would have got an 'A' and, if so, what were they?

Careful organisation of Weekend Schools appears correspondingly important, incorporating non-threatening opportunities for lecturer/student contact, initiated by the lecturer. Weekend Schools may be valued as a social experience as much as a learning experience -

> "I enjoy being part of the Institute and being there when everyone else is there battling along in the same way that I am. Sometimes I don't get a lot out of it but I still wouldn't miss it because there's always the chance that it is going to be very valuable".

But provision of well organised learning experiences, along with informal lecturer contact should help fulfil both aims and increase the likelihood of a deep approach to study.

Student Number Two

Don is in his early forties and is married with four children. He is an unemployed engineer "knocking up units to get a further qualification". His employment situation thus contributes to an obvious vocational extrinsic orientation towards his studies -

> "in some aspects I've become redundant. I'm employed, not by choice, and I definitely need to upgrade and update."

However, he also shows evidence of academic intrinsic and extrinsic orientations.

> "I'm interested in studying for its own sake and I'm always interested to achieve a reasonable standard."

His enjoyment of study is an asst in "pumping out one assignment per week for first semester to survive and pass each of the 5 units being tackled".

The heavy workload fosters a strategic approach to learning -

> "the recommended time for the first assignment is given as 2 weeks. Does this mean full-time at 10 hours/day, full-time at 5 minutes/day, full-time at 2 hours/day? I have 5 assignments to complete this month so the '2 weeks' recommended is not practical."

In line with this approach, he charts the assignment date for each month and tables the value of assessment components, noting the minimum required in each case for a pass, and is consequently preoccupied with balancing assignments, grades and time -

> "when another assignment is due out in three or four days time, then I've got to cut my losses. Initially I aim for 100% but then I've got to cut it down and just be satisfied with a pass."

Within the limitations of this assignment-consciousness he sees himself as having become "more and more active in the (learning) process although examinations provide the main stimulus to this activity". He has the surface approach characteristic of perceiving learning as "getting information from the lecturer or text books", but his comparison of learning to the completion of a jigsaw puzzle -

> "looking at each little increment put before me and grasping it and putting it together"

pre-supposes and active reconstruction of knowledge which is associated with deep learning approaches.

He is continually pulled from intrinsic academic interest and a deep approach, towards extrinsic aims and a strategic surface approach -

> "I get fired up on this and then I look up my diary to see what other assignments are due and the program and number of subjects I've got to get through to get a degree. I'm looking to see ... what are my losses, what are my gains if I don't make it with this subject."

> "Lecturers fire one's enthusiasm but the drudge of actually soaking up information and outputting assignments dampens that enthusiasm."

His lack of employment, and his study commitments, have affected his role in the household -

> my wife is also studying so we have to balance things out ... my approach and attitudes have been very important in making it all possible."

His family responsibilities influence his strategic approach -

> "I'm always compromising family requirements and this dictates how I structure my time."

He appears to enjoy this family involvement, bringing to it the positive, confident attitudes with which he approaches his study:

> "spent morning at the local kindergarten doing 'milk and fruit' duty and assisting where required; good fun and good experience, as well as being an excellent opportunity to look at my third daughter in a kinder situation."

But his study time is, consequently, continually interrupted -

> "the only peaceful time at our place is after 9 pm. Study then becomes pleasurable."

The social context of his study and the heavy workload create a need for study material that will allow for optimum use of limited time. He mentions the assistance of -

> "a well-structured study guide that lists references clearly so that .. you can quickly sift through",

and of information that is "as pre-packaged as possible", involving text books that are closely associated with the course.
He points to the importance of advance organisers -

> "I want to know where I'm headed and why I'm headed there; what are the overall objectives of the subject",

and of assignments that are evenly paced -

> "being a bit slack and having other priorities, it is essential the the work be sent off in little parcels; that every week or two weeks something is sent off instead of, say, reaching a period of six months and then you've got an assignment to put in which is a huge thing because you tend to put this to the last".

For Don it seems that while pressures of time and assessment requirements tend to encourage surface approaches, the provision of paced, small assignments might allow for more active learning throughout the course, perhaps reducing the stress associated with assessment and minimising the perceived compromises that need to be made with grades -

> "the 'Study by Assignment' method suits me more than the old Yallourn Technical College method of 'attending classes with minds receptive'.

Student Number Three

Rae is a housewife in her mid-twenties. She has three young children and describes herself as "despite frequent resolutions - one of the most poorly organised people in the whole wide world". Her aim in studying is to gain a teaching qualification. She had previously studied full-time to this end at another institution, but did not complete the course.

She reveals a definite vocational extrinsic orientation to her studies -

> "I'm very materialistic, I want a diploma at the end which will give me a job eventually."

Rae also shows evidence of intrinsic academic and personal orientations in her appreciation of 'intellectual stimulation' and 'relevant learning which enriches even your understanding of life', but these are secondary -

> "I love it. I sat down the other night rather reluctantly to do some research and came across something that put things in a whole new light. It gives me a good feeling and extends my understanding of the situation I'm in now ...... but that's a bonus. I do love studying and getting something out of it. It's terrific."

Corresponding to her major and minor orientations, Rae distinguishes between "book learning" and "meaningful learning". Thus, she recognises the active process associated with a deep approach to learning.

> "If I'm getting something out of that knowledge, not just theoretical bumpff, it becomes part of my whole life experience. If you use theoretical knowledge together with practical experience, then you've really got something meaningful."

However, Rae regards the learning involved in her studies as primarily "book learning" and adopts a surface approach as she sees this as the means of passing the exams and completing the course, "the main aim is to give the tutors what they're looking for."

She is consequently "syllabus bound" and places great emphasis on gaining clear direction from lecturers and study guides -

> "I didn't really know what was wanted and this fact made it very difficult to study the subject. I thought the study guides were very badly worded and every time we raised the question with the lecturers they couldn't seem to put their needs into concrete terms."

The social context of her studies amidst substantial family and domestic responsibilities, intensifies her reliance on this approach -

> "If I can sit down with a question and know exactly what is expected of me, then I know which direction to go in and know I'm not wasting my time, and time's a bit of a luxury, I find."

Her spouse is supportive 'which helps', but this trends to be passive and insufficient to alleviate the stress of trying to study in less than optimum conditions. There is a "disorganisation" that results from her gender role -

> "Had a really frustrating day on Sunday trying to study with the kids making mayhem around me. I have no separate place to study, just a desk made of a wardrobe door with two wardrobe drawers on either end in a corner of the loungeroom. It's walled off with beanbags, but Susie's worked out how to bet them now. On that particular day Fred's support was in theory only - he didn't take responsibility for the kids or meals."

Consequently her orientation, her approach to learning, and the social context of her studies, converge to support a clearly perceived requirement for well designed courses, presented by "enthusiastic and committed" staff. She requests that it be 'really emphasised to the lecturers how critical time is to us and how we don't like it being wasted'.

While such syllabus-dependence may seem to counter an institutional priority for deep learning, she also states that her "interest in a subject seems directly proportional to the interest/enthusiasm/skill of the organisers", applying that deep learning is more likely to result from well organised courses, as she feel that, 'taking a college course isn't necessarily related to learning'.

The context of her studies and her requirements relating to course design also have implications for assessment. Rae regards herself as a mediocre student, 'because I can't give it the commitment of time that it needs to make a better student', although she recognises that, 'if I got a good grade it would be easier to get a teaching position'. However, she feels that the development of her interest in a course, which she relates to the effectiveness of course design, is also associated with gaining good grades and, as 'a bonus', she is likely to achieve 'really meaningful' or deep learning.

Rae's stress on the clarity of course materials, and the importance of time, are also relevant to organisational aspects of her external study. Weekend Schools are seen as useful if the 'lecturers' requirements' need clarification, but if the course is well organised 'all the information I want is in the study guide' and she would prefer to spend the equivalent time 'going to a friend's place to do a bit of study'.

Consequently, from the point of view of Rae, and given the constraints of her time, the resources of the institution are better directed towards refinement of external materials than the development of face-to-face learning activities. Weekend Schools are not valued in terms of peer relationships, and she would prefer to organise the social contacts associated with her learning informally.

Conclusion

Many students and staff have participated in this study, and we thank them. Looking at the ways that external students approach their study in distance education helps them see how their peers cope with the pressures and distractions; and also helps them recognise their strengths as a mature age students. The insights provided into study methods offer the lecturer help both in the design and writing of their study materials and also helps them to guide their students through their learning to success in study.

A complementary study is currently underway to see how GIAE students use their study guides, and in particular to see what effect the textual design of the printed material has on student learning.

We thank all those academic staff and students who have participated in these studies for their collaboration.

References

Entwistle, N and Hounsell, D., 'Student learning in its natural setting setting', Higher Education, 8, 4, pp 359-363.

Filstead, W. J. 'Qualitative Methods - a needed perspective in evaluation research', in Cook, T D and Reichardt, C S (eds) Qualitative and Quantitative Methods in Evaluation Research, Sage, Beverly Hills, 1979.

Gibbs, G., Teaching Students to Learn, OU Press, Milton Keynes, 1981.

Glaser and Strauss, A ., The Discovery of Grounded Theory, Aldine, New York, 1967

Martin, F. and Saljo, R., 'On qualitative differences in learning, outcomes and process 1 and 2', British Journal of Educational Psychology, 46, pp 4-11 and 15-127, 1976.

Marton, F., Entwistle, N. and Hounsell, D., The Experience of Learning, Scottish Academic Press, Edinburgh, 1984.

Marton, F. and Svensson, L., 'Orientation to Studies, Approaches to Texts: A Relational View of Study Skills Applied to Distance Education' in Daniel, J. S., Stroud, M. and Thompson, J. R., Learning at a Distance: A World Perspective, ICDE - Athabasca University, Edmonton, 1982

Marton, A. R., Gibbs, G. and Taylor, E., 'Variation in Students' approaches to Studying' British Journal of Educational Technology, 13, 2, 107-113, 1982.

Perry, W. G., Forms of Intellectual and Ethical Development in College Years: A Scheme, Holt, Rinehart and Wilson, New York, 1970.

Rowntree, D., Assessing Students: How Shall We Know Them, Harper and Row, London, 1977.

Saljo, R., 'Learning about Learning', Higher Education, 8, 4, pp 443-451, 1979.

Taylor, E, Morgan, A. R. and Gibbs, G., 'The Orientations of Open University Students to their Studies', Teaching at a Distance, No 29, 3-12, 1981.

Taylor, E. Morgan, A. R. and Gibbs, G, 'The Orientations of Open University Students to their Studies', Teaching at a Distance, No 20, 3-12, 1982.

Wilson, G 'The Use of Ethnographic Techniques in Educational Research', Review of Educational Research, 47, 1, pp 245-265, 1977.

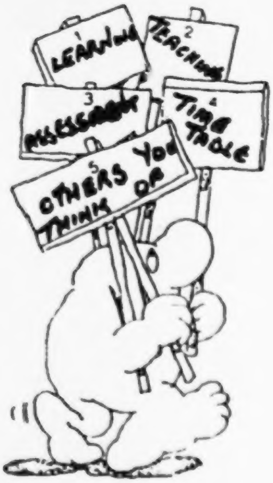
CIRCULAR:

The time has come for all interested staff of the Aboriginal Health Programme to design a programme of learning for Health Assistants/Workers.

A programme of learning can be called a curriculum, which makes it quicker to say and shorter to write.

The questions that I will be asking you have to do with deciding what should be in the curriculum. For example:

1. What should be learnt by Health Assistants/Workers?
2. What teaching methods to use?
3. How are Health Assistants/Workers to be assessed?
4. What sort of a timetable should the teaching and assessment fit into?


1 LEARNING
2 TEACHING
3 ASSESSMENT
4 TIME TABLE
5 OTHERS YOU THINK OF

This task I am asking you to do is not easy. Most of you have not had teacher training so you only have your own experiences to go by. I urge you to 'have a go' at contributing your thoughts and your feelings about what you want in a curriculum.

It is not easy to write down your thoughts and feelings sometimes but you will need to if you are to develop skills in primary health care. Doing it for this project will be good practice.

THE TASKS - do these as fast or as slowly as you like. Just have them back to me by the 16th February, 1987.

TASK NO. 1 - Please read the enclosed information about what the curriculum will mean.

TASK NO. 2 - Now look at the list of minimum standards and follow the directions. These minimum standards are meant to take the place of entry standards. Entry standards are too rigid for what we want. These minimum standards can help to establish what qualities you would like Health Assistants/Workers to have.

TASK NO 3. - You're doing well. Next you need to consider what Health Assistants/Workers should possibly believe in to give the quality of client care you know the community deserves. The community has a right to expect the safest high quality care from us. Once again read the directions that are on the same page as the philsosphy of Health Assistants/Workers in the Aboriginal Health Programme.

TASK NO. 4 - The second last task so you've almost finished.

Please write down on the page headed GOALS what you want from this curriculum. This information helps to make sure you're goals can be met. If this curriculum cannot meet your goals it is best you know what to expect from it before you start.

TASK NO. 5 - The simplest task has been saved until last because you've been through a brain drain. Just fill in the questionnaire and send it with the other task sheets to Gail Perry, Training Unit. You will have made your contribution to the planning stage of the curriculum. This will result in a curriculum design being sent to you that you can call your own. Thank you for your efforts. Please return your completed tasks by 16th February, 1987.

OVERVIEW OF THE FOUR SESSIONS ON DEVELOPING TEACHING SKILLS FOR TRANSMISSION VIA SATELLITE

Session One
27.8.86
4pm - 6pm

Introductory Session

1. Panel of Speakers from Aboriginal Health Programme Head Office
2. Change in Kit Design
3. Teaching Program for Stradbroke Island
4. A Diabetic Program in Brisbane

Session Two
3.8.86
4pm - 6pm

Ways People Learn

1. Learning Throughout Life
2. Aboriginal Learning Styles
3. Adult Learning
4. What is Learning?

Session Three
10.8.86
4pm - 6pm

Teaching Methods I - Learner Centred

1. Lecturettes I
2. Informal Debating
3. Games and Simulations
4. Role Play

Session Four
17.8.86
4pm - 6pm

Teaching Methods II - Learner Centred

1. Lecturettes II
2. Demonstration
3. Field Trip
4. Individualised Instruction

APPENDIX C

ABORIGINAL LEARNER CHARACTERISTICS AND LEARNING STYLES ACTIVITY

For the next 5 - 10 minutes divide into small groups (suggest twos or threes) and consider these statements made about Aboriginal learners and learning styles.

Can you recognise these characteristics and styles in yourselves? Have you come across them when teaching in the community?

This is not a guessing game and there are no right or wrong answers. Your judgement should be based on your own experience working and teaching in your area.

Put ticks beside the characteristics that you think APPLY TO Aboriginal learners in your community.

Put crosses beside the characteristics that you think DO NOT APPLY TO Aboriginal learners in your community.

For example. . are non-competitive may have two ticks and one cross in a group of three (✓✓X . are non-competitive)

ABORIGINAL LEARNER CHARACTERISTICS

ABORIGINAL LEARNERS:-

. are non-competitive
. are co-operative
. believe achievement is not important
. believe outcomes of behaviour are beyond their control
. have a short attention span
. are resistent to change

ABORIGINAL LEARNING STYLES

Now do the same with these statements about Aboriginal learning styles.

Aboriginal people learn:-

. through observation and imitation rather than through verbal instruction, oral or written

. through personal trial and error

. through real-life experience rather than from set practice

. through real-life skills and situations rather than make believe situations

. through being person-oriented rather than information-oriented

Reference: "The Aboriginal Child at School" Vol. 8, No. 5 Oct/Nov 1980

After you have finished this activity come back together as a total team or group with a facilitator and discuss and combine your results. This could take another 5 - 10 minutes.

Phone through your total ticks and crosses and they will be displayed on a graphic on the screen.

Also feel free to make any comments about the characteristics and learning styles and add any extra you feel should be there.

You will later be able to compare these with adult learning styles I will be discussing with you.

ABORIGINAL LEARNERS CHARACTERISTICS
LEARNING STYLES ACTIVITY

FACILITATOR SCORING SHEET

		TOTAL
ABORIGINAL LEARNERS:		
ARE NON-COMPETITIVE	TICKS	
	CROSSES	
ARE CO-OPERATIVE	TICKS	
	CROSSES	
BELIEVE ACHIEVEMENT IS NOT IMPORTANT	TICKS	
	CROSSES	
BELIEVE OUTCOMES OF BEHAVIOUR ARE BEYOND THEIR CONTROL	TICKS	
	CROSSES	
HAVE A SHORT ATTENTION SPAN	TICKS	
	CROSSES	
ARE RESISTENT TO CHANGE	TICKS	
	CROSSES	
ABORIGINAL PEOPLE LEARN:		
THROUGH OBSERVATION AND IMITATION RATHER THAN THROUGH VERBAL INSTRUCTION, ORAL OR WRITTEN	TICKS	
	CROSSES	
THROUGH PERSONAL TRIAL AND ERROR	TICKS	
	CROSSES	
THROUGH REAL-LIFE EXPERIENCE RATHER THAN FROM SET PRACTICE	TICKS	
	CROSSES	
THROUGH REAL-LIFE SKILLS AND SITUATIONS RATHER THAN MAKE BELIEVE SITUATIONS	TICKS	
	CROSSES	
THROUGH BEING PERSON-ORIENTATED RATHER THAN INFORMATION-ORIENTATED	TICKS	
	CROSSES	

WORKSHOP PARTICIPANTS

Titles and Addresses at the time of the Workshop

Ms Fran Abramowich	Gippsland Institute
Mr Tony Barnett	Head: Nurse Education WIAE PO Box 423 WARRNAMBOOL 3280 Telephone (056) 64 0374
Mr Eric Chan	Nurse Project Officer Commonwealth Department of Health PO Box 100 WODEN 2606 Telephone (062) 89 8418
Ms Mille Ching	Gippsland Institute
Miss Beryl Clarke	Deputy Head (Admin) Mackinnon School of Nursing, Royal Children's Hospital, Flemington Road PARKVILLE 3052 Telephone (03) 4658934
Mr Roger H Clements	Snr. Development Officer Riverina-Murray IHE PO Box 599 WAGGA WAGGA NSW 2650 Telephone (069) 232222
Ms June Cochrane	Executive Director College of Nursing, Australia 2 Slater Street MELBOURNE 3004 Telephone (03) 2663425
Mr Richard Cohen	Gippsland Institute

Dr Helen Connole	Senior Lecturer in Psychosocial Sciences SA CAE-Sturt, Sturt Road, BEDFORD PARK SA 5042 Telephone (08) 2755211
*Dr Gayle Crawford	Instructional Psychologist Athabasca University 14515-122 Avenue Edmonton Alberta T5L,2W411 CANADA
Ms Wendy Crispin	Gippsland Institute
Ms Margaret Dawson	Nursing Officer, Victorian Bush Nursing Association, 130 Little Collins Street, MELBOURNE 3000 Telephone (03) 6546888
Mr John Dekkers	Capricornia IAE ROCKHAMPTON Qld 4700 Telephone (079) 361177
Ms Angela Dempsey	Gippsland Institute
Mr Bob Denholm	Computer Based Training Systems PO Box 352 BOX HILL Vic 3128 Telephone (03) 8623063
Mr Bill DeVink	Assistant Director East Gippsland Community College SALE 3850
Ms Marguerite Ellis	27 Haros Avenue NUNAWADING 3131 Telephone (03) 3470325

Ms Beryl Etherington	Lecturer TAFE , WA Education Dept, 151 Royal Street EAST PERTH 6000 Telephone (09) 4275346
Mr John Evans	Head External Studies Gippsland Institute
Mr Ross Fear	Snr. Lecturer, Hawkesbury Ag College RICHMOND NSW 2753 Telephone (045) 701421
Miss Julienne Feast	Director of Nursing, Mt. Gambier Hospital Inc. PO Box 267 MT GAMBIER SA 5290 Telephone (087) 242211 (Extn 215)
Mr John Fenwick	VCAH, Mc Millian Campus PO Box 353 WARRAGUL Vic 3820 Telephone (056) 235366
Ms Maxine Fine	Literary Editor Australian Nurses Journal 132-136 Albert Road SOUTH MELBOURNE 3205 Telephone (03) 6908611
Dr Peter Fleming	Director of Educational Development Royal Austn College of General Practitioners 4th Floor 70 Jolimont Street JOLIMONT 3002
Ms Patricia Flynn	Lecturer, SA CAE - Sturt, Sturt Road BEDFORD PARK SA 5042 Telephone (08) 2755418

Mr Douglas Fogerty	Instructional Designer, Mayfield Centre, 11-27 Mayfield Avenue MALVERN 3144 Telephone (03) 203221, Ext. 47
Ms Glenis Francis	Lecturer, Nursing, Riverina-Murray IHE PO Box 588 WAGGA WAGGA NSW 2650 Telephone (069) 232444
Ms Wendy Gavin	Inservice Educator Mercy Private Hospital 159 Grey Street EAST MELBOURNE 3002 Telephone (03) 4192555
Mrs Audrey Grant	Lecturer Post Basic Education School of Nursing Lincoln Institute 2 Slater Street MELBOURNE 3004 Telephone (03) 2691700
Ms Jane Hall	Nursing Advisory Unit Health Dept. Victoria 555 Collins Street MELBOURNE 3000 Telephone (03) 6167855
Mr Michael Hazelton	Macarthur IHE PO Box 108 MILPERRA NSW 2214
Mrs Barbara Horner	Senior Tutor Curtin Uni of Technology Kent Street BENTLEY WA 6102 Telephone (09) 3507790

Mr Stuart Hosking
Head, External Studies Dept.
Warrnambool IAE
PO Box 423
WARRNAMBOOL 3280
Telephone (055) 640431

Prof Richard Johnson
Commonwealth Tertiary Ed Com
PO Box 18
BELCONNEN ACT 2616
Telephone (062) 643880

Ms Karen G Jones
Nurse Educator
CCECN Flinders Medical Centre
Bedford Park SA 5042
Telephone (08) 2759911 ext. 5034

Ms Lorraine Kelly
Lecturer
Warrnambool IAE
PO Box 423
WARRNAMBOOL 3280
Telephone W(055)640335

Ms Pam Kilpatrick
Senior Teacher
Royal Womens Hospital
9 Finmere Crescent
UPPER FERNTREE GULLY 3156
Telephone W(03) 3442152

Ms Anne Lloyd
SA CAE-Sturt
Sturt Road
BEDFORD PARK SA 5042

Mrs Rhonda Mackie
Acting Principal Nurse Educator
Mt. Gambier Hospital Inc.
PO Box 267
MOUNT GAMBIER 5290
Telephone (087) 242211 (ext. 387)

Ms Margaret McKinnon	Head, Department of Nursing Institute of Catholic Education 251 Mt Alexander Road ASCOT VALE 3032 Telephone (03) 3762522
Ms Anne McMurray	Senior Lecturer, Nursing Curtin University of Technology Kent Street BENTLEY WA 6102 Telephone (09) 3512065
Mrs Jan Mills	Nurse Educator, Continuing Education Co-ordinator Retraining Courses Lismore North Coast NSW College of Nursing "Muirton" TABULAM NSW 2470 Telephone (066) 661221
Ms Geraldine Milton	Royal District Nursing Service 452 St Kilda Road MELBOURNE 3004 Telephone (03) 2668791
Ms Mary Molloy	Co-ordinator P/T courses Child Care Studies Preston College of TAFE St. Georges Road PRESTON Vic 3072 (03) 4793258
Mr Daryl Nation	Gippsland Institute
*Ms Brenda Nichols	Head, Centre for Nursing Studies Northern Rivers CAE PO Box 157 LISMORE NSW 2480 Telephone (066) 230600
Mr James O'Mullan	Principal Lecturer and Section leader Nursing Studies Section Institute of Medical & Health Care Hung Hom, Kowloon HONG KONG

Ms Jo Osborne	Lecturer (Instructional Design) TSIT PO Box 1214 LAUNCESTON TAS 7250 Telephone (003) 260590
Dr Michael S Parer	Head Eductional Development and Research ~~Gippsland Institute~~ Telephone (051) 220277
Ms Gail Perry	Nurse Educator Aboriginal Health Programme GPO Box 48 BRISBANE 4000 Telephone (07) 2277509
*Mrs Ruth Phillips	Secretary Royal Austn Nursing Federation (Kalgoorlie Sub-Branch) 62 Vivian Street BOULDER WA 6432 Telephone (090) 212222 Ext. 2336
Mr Joan Pratt	PO Box 266 HEALESVILLE 3777 Telephone (059) 625996
*Mrs Gisela Pravda	Chairperson, Workshops, Visits & Exchanges Committee International Council for Distance Education Greulichstrabe 7 1000 Berlin 48 WEST GERMANY
Mr Frank Prem	Office of Psychiatric Services Health Department 555 Collins Street MELBOURNE 3000 Telephone (03) 6167989
Ms Penny Rawlins	Head of Resource Centre Mayfield Centre 11-27 Mayfield Centre MALVERN 3144

Mrs Pam Ryan	Projects Officer College of Nursing, Australia 2 Slater Street MELBOURNE 3004 Telephone (03) 2665145
*Mr Bruce Scriven	Secretary, ASPESA Brisbane CAE Victoria Park Road KELVIN GROVE Qld 4059
*Dr David Sewart	ICDE The Open University Director, Regional Academic Services Walton Hall Milton Keynes MK7, 6AA UNITED KINGDOM
Ms Jane Shoebridge	Lecturer SA CAE-Sturt Sturt Road BEDFORD PARK 5042 Telephone (08) 2755258
Ms Lesley Siegloff	Principal Nurse Educator Royal District Nursing Society SA Inc 33 Kenneth Road MORPHETT VALE SA 5162 Telephone (08) 3330844
Mrs Louise Sledzik	Senior Lecturer- Coordinator Midwifery Studies Lincoln Institute of Health Sciences 4 Gloria Avenue DANDENONG 3175 Telephone (03)2691700
Ms Kay Smith	Head of Department Child Care Studies Preston College of TAFE St. Georges Road PRESTON Vic 3072

Ms Gill Smith
Curriculum Instructional Designer
School of Nursing
Macarthur Institute of Higher Ed.
PO Box 108
MILPERRA NSW 2214
Telephone W(02)7729376

*Mr Kevin Smith
President, ICDE
Director, External Studies
University of New England
ARMIDALE NSW 2350

Mr Peter Smith
Learning Resource Centre
Gordon Techical College
PO Box 122
GEELONG VIC 3220

Ms M Stevens
Director of Nursing
Division of Child Health
184 St Paul's Terrace
BRISBANE Qld 4006

*Ms Margaret Stevens
Ballarat CAE
PO Box 663
BALLARAT 3350

*Ms Barbara Straker
Staff Development
Co-ordinator, Nursing
Mildura Base Hospital
PO Box 306
MILDURA 3500

*Ms Diane Swanson
NMCCES
Nursing Advisory Unit
19th Floor Health Department
555 Collins Street
MELBOURNE 3000

*Mrs M Tassicker
Adult Migrant Education
250 Elizabeth Street
MELBOURNE 3000

Ms Heather Telfer	Deputy Head (Clinical) C/- Mackinnon School of Nursing Royal Children's Hospital Flemington Road PARKVILLE 3152 Telephone (03) 3456277
Mr Robert Thornton	Principal Nurse Educator Outreach Nursing Education Service PO Box 1996 PORT AUGUSTA 5700 Telephone (086) 426788 or 426465
Ms Margaret Thyssen	Curriculum Co-Ordinator Royal District Nursing Service 452 St Kilda Road MELBOURNE 3004 Telephone (03) 2668791
Ms Melissa Vernon	Lecturer Curtin University of Technology Kent Street BENTLEY 6102 Telephone 3512055
Ms Susanne Warn	Nurse Educator - Training & Development Health Deptartment Victoria Mayfield Centre 11-27 Mayfield Avenue MALVERN 3144 Telephone (03) 203221
*Dr Jean Watson	Unit Coordinator Campus Box C288 4200 East Ninth Avenue DENVER, COLORADO 80262 U.S.A.
*Ms Lenis Wells	Lecturer SA CAE-Sturt Sturt Road BEDFORD PARK SA 5045

Mr Ken J Widdowson	Chairman Learning Network 120 Bridport Street ALBERT PARK 3206 Telephone (03) 6909866
Mr Geoff Wilson	Lecturer Hawkesbury Agricultural College 18 Hunter Street BLACKTOWN 2148 Telephone W (045) 701333
*Miss Heather Winderlich	Assistant Dean, Education The Northern District School of Nursing PO Box 481 BENDIGO 3550
Ms Dianne Wion	Co-ordinator Further Education Country Nurses C/o Education Centre Modbury Hospital Smart Road MODBURY SA 5092 Telephone 2652255
Mrs Valerie Zielinski	Nurse Educator The Geelong Hospital C/o School of Nursing Ryrie Street GEELONG 3220 Telephone (052) 904659

*UNABLE TO ATTEND BUT EITHER CONTRIBUTED TO OR EXPRESSED INTEREST IN THE WORKSHOP